



# **Passenger Train Emergency Preparedness Plan**

*Prepared in accordance with the requirements established by:  
The Federal Railroad Administration at 49 CFR 239*

**Revision 6**

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*Prepared by*

**Regional Transportation District Commuter Railroad  
in Cooperation with Denver Transit Partners**

**5151 Fox Street, Denver, Colorado 80216 / 720-460-5800**

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## Section 1 INTRODUCTION



## 1.1 CONTACT PERSONS FOR PLAN REVIEW

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## 1.2 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

The following definitions, acronyms, and abbreviations are either directly applicable to this Plan or are generally applicable to passenger train emergency response situations.

Amtrak –The National Railroad Passenger Corporation

BNSF – Burlington Northern Santa Fe Railway

C/P – Catenary Pole: The structures along the railroad right-of-way that support the overhead electrical catenary system.

Crewmember: a person, other than a passenger, who is assigned to perform on-board functions connected with the movement of the train (i.e., an employee of a railroad, or of a contractor to a railroad, who is assigned to perform service subject to the Federal hours of service requirements during a tour of duty).

CAP – Corrective Action Plan

DTO – Denver Transit Operators

DTP – Denver Transit Partners

DUS – Denver Union Station

EMTF – Emergency Management Task Force: A cross-functional team of senior managers representing key functions that have all-hazard emergency preparedness responsibilities within RTDC.

EMS – Emergency Medical Service: Any agency, which provides medical services in emergency situations, including paramedic, emergency medical technician, nursing, and/or physician services.

EMU – Electric Multiple Unit: The term used to designate the electrically self-propelled locomotive units (which are also passenger coaches) having two control stands; the MU (also referred to as a Married Pair) comprises two cars and is semi permanently coupled, it may be operated individually or in multiple with other MUs.

Emergency Preparedness Plan: A document which focuses on preparedness for and response to passenger train emergencies.

Emergency Responder, on-line emergency responder, or outside emergency responder: A member of a police, fire, rescue or emergency medical service or other public safety agency providing and/or coordinating emergency services.

Emergency Situations: An unexpected event related to the operation of passenger train service involving a significant threat to the safety or health of one or more persons and requiring immediate action, including:

- a derailment;
- the evacuation of a passenger train;
- a fatality at a grade crossing;
- a passenger or employee fatality, or serious illness or injury to one or more passengers or crewmembers requiring hospitalization;
- a security situation.

EAP – Employee Assistance Program: A program that provides guidance, support, and resources to employees and their families for the resolution of emotional, financial, legal, family, marital, and substance abuse problems. They also provide assistance, support, and resources to employees involved in significant emergencies.

FRA – Federal Railroad Administration: An agency of the Department of Transportation that develops and enforces rail safety regulations, investigates, analyzes railroad accidents, and conducts safety assessments of railroads.

Host Railroad: The railroad that has effective operating control over a segment of track upon which train service is conducted.

IAP – Incident Action Plan: An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments during one or more operational periods.

IC – Incident Commander: Under the NIMS, the individual responsible for the overall management of the response including developing incident objectives and managing all incident operations (see also Railroad Operations Commander).

ICP – Incident Command Post: The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP will be established by the Incident Commander.

MP – Milepost: A series of markers along the railroad right of way indicating the distance from a fixed point that are used throughout railroad system as location designations.

NIMS – National Incident Management System: NIMS is a comprehensive, national approach to incident management established by Homeland Security Presidential Directive-5. It provides a consistent nationwide template to enable Federal, State, local and tribal governments and private sector and nongovernmental organizations to work together effectively and efficiently to prepare for, prevent, respond to and recover from domestic incidents, regardless of cause, size or complexity, including acts of catastrophic terrorism.



**NRC – National Response Center:** The 24-hour federal office that maintains the 24 hour Rail Emergency Hotline (1-800-424-0201) to take reports of railroad incidents involving hazardous materials, grade crossing fatalities, accidents resulting in injury or death of railroad employees, and the refusal of railroad employees to submit to required toxicological testing.

**NTSB – National Transportation Safety Board:** The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation – railroad, highway, marine and pipeline. The NTSB determines the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents.

**OCC – Operations Control Center:** A central location on a railroad with responsibility for directing safe movement of trains. The OCC is responsible for initiating an emergency response, making appropriate notifications, on-going communication with outside first responders, recording information relevant to incidents and coordinating service recovery.

**OTS – Operational Testing System**

**PEI – Passenger Emergency Intercom**

**ROC – Railroad Operations Commander -** Under the railroad's emergency management plan the Railroad Operations Commander is the railroad person in charge of railroad operations at an incident scene. The ROC may or may not be the ranking railroad officer on scene; nevertheless all railroad functions will coordinate their actions through the ROC. The ROC acts as the railroad's liaison to the Incident Command Post.

**RTD – Regional Transportation District**

**RTDC – Regional Transportation District Commuter Railroad**

**SCC – Security Control Center:** A central location on a railroad with responsibility for monitoring security systems and supporting security operations that may establish, coordinate, or maintain communication with representatives of adjacent modes of transportation, and appropriate railroad officials during a passenger train emergency.

**SOP – Standard Operating Procedure**

**TSA – Transportation Security Administration:** The federal agency under the Department of Homeland Security that is responsible for the security of the nation's transportation systems.

**TSO – Transit Security Officer:** Transit Security Officers are RTD employees assigned as second crew members on RTDC passenger trains.

**UPRR – Union Pacific Railroad**

### **1.3 SCOPE AND PURPOSE OF THE PLAN**

The scope of this Plan is the passenger train service of the Regional Transportation District Commuter Railroad including passenger train services provided by Amtrak on its territory.

The purpose of this Plan is to comply with the requirements of 49 CFR 239 - Passenger Train Emergency Preparedness and to describe the policies, procedures and plans in place at RTDC that are intended to prepare for and respond to passenger train emergencies in the most effective manner possible.

In addition to changes made as a result of Critiques and Reviews (see Section 7.1.4), this plan will be reviewed and updated as necessary at least once each calendar year.

### **1.4 RTDC BACKGROUND INFORMATION AND SYSTEM DESCRIPTION**

#### **1.4.1 RTD Authority**

The Regional Transportation District (RTD) in the City and County of Broomfield, the City and County of Denver and the Counties of Adams, Arapahoe, Boulder, Douglas, Jefferson and Weld Colorado was created by the General Assembly of the State of Colorado in 1969 by Chapter 231 Laws of Colorado 1969 which is currently codified as Sections 13-9-101 through 13-9-164 inclusive of the Colorado Revised Statutes. This legislation authorized the RTD to develop, maintain and operate a mass transportation system and to purchase or otherwise acquire property. The RTD owns and operates bus, light rail and commuter rail systems.

#### **1.4.2 RTD/DTP Relationship**

In 2010, the Regional Transportation District (RTD) executed a Concession Agreement (CA) with Denver Transit Partners (DTP) to design, build, finance, operate and maintain a commuter rail system in and around Denver. The system – called the Regional Transportation District Commuter Railroad (RTDC) – is intended to provide better transit options across the region. Under the CA, RTD is the railroad of record and retains ownership of all the system assets. DTP leases the assets until December 31, 2044, the end date of the CA. During the operating period, DTP is responsible for the operation and maintenance of the entire system.

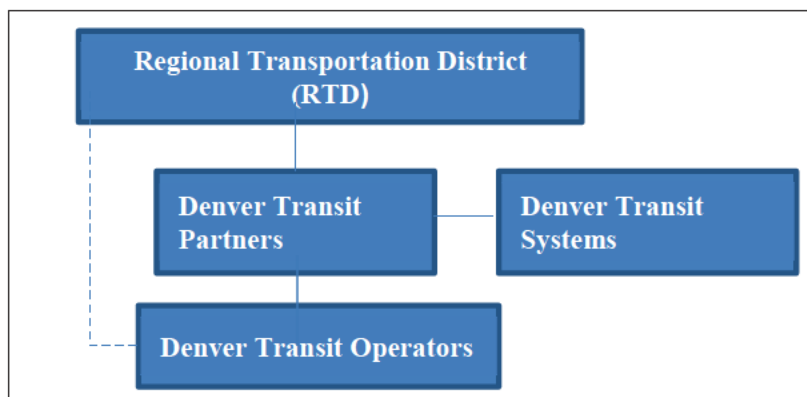
#### **1.4.3 Organizational Overview of DTP and DTO**

DTP manages financing, the client interface and project oversight. DTP has subcontracted with two separate entities to design, build, operate and maintain the RTDC, as follows:

- Under a Design/Build subcontract with DTP, Denver Transit Systems (DTS) is the designer and builder of the project.
- Under an Operating and Maintenance (O&M) Agreement with DTP, Denver Transit Operators (DTO) has comprehensive responsibility for the operations and maintenance of RTDC.

The relationships between the entities associated with RTDC are illustrated in Figure 1.

*Figure 1: RTDC's Organizational Relationships*



#### 1.4.4 DTO's Scope of Work

Under the O&M Agreement between DTP and DTO, DTO is responsible for performing all services connected with the operation and maintenance of the railroad. DTO is required to provide all materials, equipment, software, machinery, tools, labor, supervision, transportation, administration, training and other services and items required to perform these services. DTO has a staff of over 200 employees and contracts for various support functions.

#### 1.4.5 DTO's Approach to Operations and Maintenance

DTO operates the RTDC from the Commuter Rail Maintenance Facility (CRMF). The following functions and facilities are located in the CRMF at 5151 Fox St.

- all management and administration offices;
- the Control Center, including the Operations Control Center (OCC) and the Security Control Center (SCC) staffed by RTD personnel;
- Center (SCC) staffed by RTD personnel;
- crew dispatch and welfare facilities including lockers and restrooms;
- storage of all rolling stock on yard tracks;
- repair tracks for maintenance of rolling stock including platforms for access to equipment mounted on the vehicle roofs and traction electrification in the service and inspection bays;
- storage and warehousing for all departments.

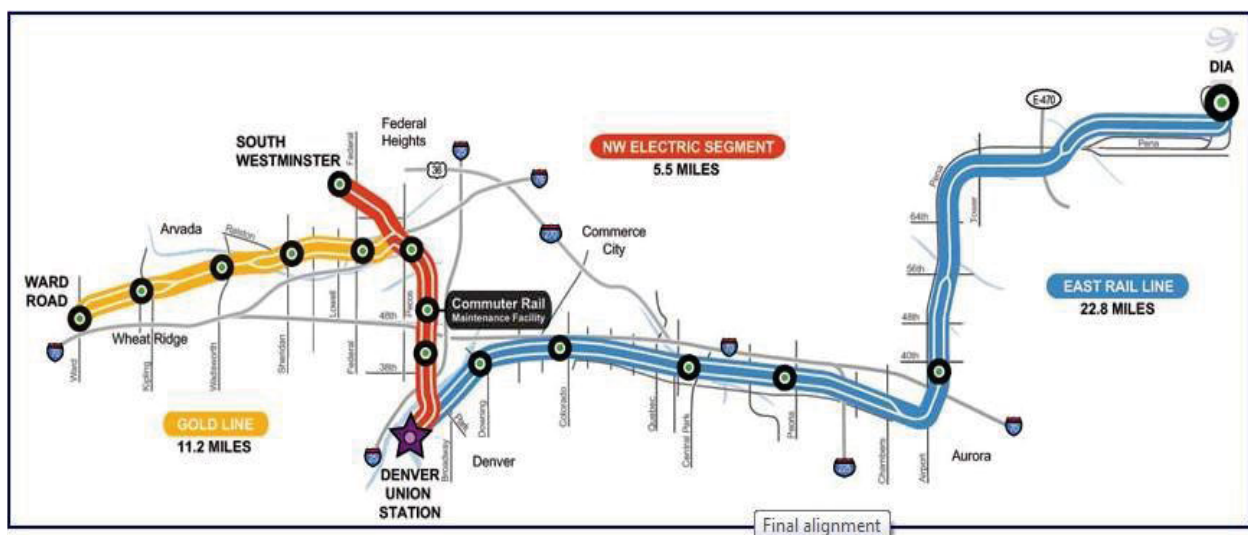
## 1.4.6 System Description

### 1.4.6.1 Operating Territory

The Regional Transportation District Commuter Railroad includes these components, as illustrated in Figure 2:

- The East Corridor—a 22.8-mile commuter rail line from Denver Union Station (DUS) in Downtown to Denver International Airport. This line has five intermediate stations.
- The Northwest Electrified Segment (NWES)—a 5.5 mile commuter rail line running north from DUS to South Westminster. Two Gold Line stations (41st and Fox and Pecos Junction) are located on the portion of track shared with the NWES and would be available for emergency discharge of NWES trains. However, there are no scheduled NWES stops at these stations.
- The Gold Line—an 11.2-mile commuter rail line, the first 3.7 miles of which are shared with the NWES. The Gold Line runs from DUS north and then west to Wheat Ridge. This line has six intermediate stations.
- The Commuter Rail Maintenance Facility (CRMF), which is adjacent to the Gold Line and the NWES approximately two miles north of DUS. The CRMF includes a central control center, a rolling stock maintenance shop, a warehouse, administrative offices, a rail storage yard and other facilities. Denver Union Station - the Commuter Rail portion of DUS, controlled and operated by RTDC - will be used by RTDC trains, Amtrak passenger trains and, to a limited extent, BNSF Railway freight trains and possibly very occasional other freight and passenger rail trains.

*Figure 2: System Overview*





### 1.4.6.2 Operations Overview

Until 2020, RTDC expects to operate with two car trains with a two person crew of a dual-certified Operator and a Transit Security Officer. The system-wide maximum allowable speed is 79 miles per hour. The train numbering scheme and the number of trains by line is shown in Table 1. The headways and spans of service are as shown in Figure 4. Travel time from DUS to Denver International Airport (DIA) is 35 minutes, from DUS to Ward Road 26 minutes, from DUS to South Westminster 11 minutes. Trains operating between DUS and South Westminster do not stop at 41st and Fox or Pecos Station. All other trains stop at every station on their lines.

**Table 1: Scheduled Trains and Train Numbers by Line**

Line	Train Numbers Odd – Northbound Even – Southbound	Scheduled Trains Weekday	Scheduled Trains Weekend
East	100 - 299	144 M-Th. / 146 Fri.	146 Sat. / 144 Sun.
Reserved. For North Metro	300 - 499	NA	NA
Gold	500 - 699	131	123
Northwest	800 - 899	47	34

**Table 2: Spans of Service and Headways**

Day	East Corridor			Gold Line			NWES		
Weekday	From	To	Headway	From	To	Headway	From	To	Headway
Early	3:00	6:00	0:30	4:00	6:00	0:30	5:00	6:00	1:00
AM Peak	6:01	9:00	0:15	6:01	9:00	0:15	6:01	8:30	0:30
Midday	9:01	15:00	0:15	9:01	15:00	0:15	8:31	15:30	1:00
PM Peak	15:01	20:00	0:15	15:01	18:30	0:15	15:31	18:30	0:30
Evening	20:01	1:00	0:30	18:31	0:30	0:30	18:31	22:30	1:00
Saturday	From	To	Headway	From	To	Headway	From	To	Headway
AM	3:00	6:00	0:30	4:00	8:00	0:30	5:00	9:00	1:00
Midday	6:01	15:00	0:15	8:01	15:00	0:15	9:01	15:00	1:00
PM	15:01	20:00	0:15	15:01	18:30	0:15	15:01	18:00	1:00
Evening	20:01	1:30	0:30	18:31	0:30	0:30	18:01	22:30	1:00
Sunday	From	To	Headway	From	To	Headway	From	To	Headway
AM	3:00	6:00	0:30	4:00	8:00	0:30	5:00	9:00	1:00
Midday	6:01	15:00	0:15	8:01	15:00	0:15	9:01	15:00	1:00
PM	15:01	20:00	0:15	15:01	18:30	0:15	15:01	18:00	1:00
Evening	20:01	1:00	0:30	18:31	0:30	0:30	18:01	22:30	1:00

### 1.4.6.3 Stations

With the exception of DUS and DIA, the stations are relatively simple. They have high platforms (50-1/2 ± 1/8 inches above top of rail) for level boarding, platform canopies, and benches. Platforms on the East Corridor are four car lengths and the NWES and Gold lines are two car lengths. Most stations have

pedestrian grade crossings at both ends of the platforms; some have pedestrian overpasses with elevators. The stations have park-and-ride lots and many are also served by RTD bus routes from which passengers can transfer to the commuter rail service. At Peoria Station passengers can transfer to light rail. Amenities in the stations include public address/variable message systems to inform passengers when the next train will arrive and to allow for announcements as needed for passenger information during unusual circumstances or incidents and CCTV cameras providing images to both the operations control center and the RTD's Security Command Center.

#### *1.4.6.4 Track*

All tracks are new construction with 4' 8½" gauge on 15' track centers except where they widen for center island platforms. Direct fixation track is installed on bridges and in low-elevation areas susceptible to flooding. The track in stations, on sharper curves and in special track work is constructed with 115lb head-hardened rail. All other track, except for DUS's 136lb rail is standard strength 115lb rail. Emergency inside guardrails are provided on all structures and retained fills more than three ft. high. All tracks will be maintained to a minimum of FRA Class 4 Standards except in DUS which will be maintained to Class 2 Standards.

#### *1.4.6.5 Grade Crossings*

The system has 37 grade crossings: 9 pedestrian-rail grade crossings at stations and 28 highway-rail grade crossings. Nearly all of the highway-rail grade crossings will be in quiet zones and most of the crossings will feature (Appendix A provides details):

- Quad gates or Concrete medians
- Loop detectors to prevent vehicles from becoming trapped between gates
- Advanced Preemption Closed Circuit Television Pedestrian Treatments
  - Many locations include gates
  - Tactile warning strips with truncated domes

Pedestrian crossings are protected with a combination of flashing signals, audible bells, and ancillary another train approaching signs. These warning devices will be controlled with fixed approach Audio Frequency track circuits as a base, with an overlay of PTC functions to provide constant warning time control, with closed loop train feedback.

#### *1.4.6.6 Traction Power*

Traction power is provided through a 25kV overhead catenary system. There are two traction power substations with a total of three transformers, and the system is configured so that any one of the transformers can provide sufficient traction power to operate the entire commuter rail system if necessary. Power is centrally controlled by Dispatchers from the Operations Control Center.



#### *1.4.6.7 Signals and Train Control*

RTDC uses a traditional cab-signaling Automatic Train Control (ATC) system in conjunction with a Positive Train Control (PTC) overlay system. There are wayside signals only at interlockings. The PTC system uses Wabtec's Interoperable Electronic Train Management System (IETMS) to meet the Federal Railroad Administration's (FRA) requirements in accordance with the 2008 Rail Safety Act including:

- Prevention of train-to-train collisions
- Enforcement of over-speed limits (including civil, routing, temporary)
- Prevention of incursions into established work zone limits
- Prevention of movements over switches set in the wrong direction (in interlockings and hand throw switches)

The PTC system uses a combination of fiber and wireless communication technologies deployed in a redundant manner to provide a robust, reliable and highly-available system.

#### *1.4.6.8 Operations Control Center*

The Operations Control Center is staffed on a 24-7 basis to control train operations and manage the power distribution system. There are at least two Dispatchers in the OCC at all times. The OCC also houses a maintenance desk, also staffed 24-7, from which a signal/communication technician monitors the communication network and troubleshoots any problems. In addition, the OCC is the clearing house for trouble calls of all kinds. The OCC dispatches maintenance personnel as needed to perform repairs. Most importantly, the OCC is responsible for notifying emergency responders, local law enforcement, RTDC management, RTD officials, regulatory agencies and other affected parties in the event of an emergency. The Dispatchers are trained in a wide range of standard operating procedures for response to incidents and unusual events.

#### *1.4.6.9 Dispatch*

The Dispatcher's main tool is the Train Management Dispatch System (TMDS), which is linked to the signal and train control systems to monitor train locations, switches and signals. The TMDS system allows the Dispatcher to set routes, issue and cancel authorities, turn the overhead catenary power on and off, monitor operators' hours of service, issue public address announcements, and monitor closed circuit television images, among other functions. The TMDS system also receives alerts from the SCADA system to notify the Dispatchers when any of thousands of elements throughout the system is not working properly.

#### *1.4.6.10 Security Command Center*

Adjacent to the Operations Control Center is the Security Command Center (SCC) from which RTD staff coordinates with OCC Dispatchers to respond to safety and security issues. The SCC staff dispatches Transit Security Officers (armed security guards) throughout the commuter rail system to:

- Act as the second crew person on RTDC passenger trains
- patrol trains, stations, platforms and parking facilities;
- perform fare inspection on trains, stations and fare paid areas;

- provide security support to the train operators;
- respond to accidents and incidents in cooperation with law enforcement personnel; and perform mobile patrols.

The SCC staff also operates and monitors all CCTV security systems including on-board and station-based cameras as well as cameras at grade crossings.

#### *1.4.6.11 Rolling Stock*

All vehicles for the system are electric multiple units made by Hyundai Rotem. To serve three lines, there are 27 married pairs, each of which is 170 feet long and has one pantograph. The cars are completely FRA-compliant. There are two passenger doors on each side of each car with a threshold height of 50-1/2 inches above top of rail. The doors can be operated by the Operator or by passengers if the operator enables this function. Regardless of the mode selected by the Operator, the doors can also be opened by an emergency manual override located at each door. Key features of the cars related to passenger communication and monitoring are the CCTV system, the public address system and the Passenger Emergency Intercom (PEI).

The CCTV system consists of eight cameras per car (4 passenger area, 1 cab console, 1 forward facing mounted at the windshield and 2 exterior side), a monitor in the Operator's cab and a digital video recorder. The interior cameras give complete passenger compartment coverage. All cameras constantly record when the train is powered up. The video recorder's capacity is 72 hours. The Cab Monitor has several options for viewing. The default is a four image split screen that cycles through the interior images from all cars in the train. The Operator can select images from one car or one camera if necessary. To avoid Operator distraction, the monitor goes dark when the train is in motion and turns on only when the train stops. The video image may be viewed by the OCC or SCC at all times. When the passenger side doors open the cab monitor automatically switches to view the exterior side cameras, cycling between all the cars in the consist. When the doors close the view remains on the exterior side cameras for 10 seconds after train motion is detected allowing the Operator to monitor the platform until the train clears it. The OCC and RTD's Security Command Center can view real time video from any of the CCTV cameras, one at a time.

The PA system consists of a Main Operator's control panel with interfaces for the interior/exterior PA, Passenger Emergency Intercom (PEI) and cab-to-cab intercom. The Operator's cab has a center-mounted gooseneck microphone for use when facing forward and a right hand mounted microphone for use when turned to the side window for right side door operation. A third microphone station is located next to the left hand side door control panel. There are seven ceiling mounted PA speakers in the passenger compartment and four external speakers adjacent to the side entry doors. The system can make automatic Station and special PA announcements that have been loaded into the onboard system from the OCC. The OCC can make announcements on-board the train from the OCC using the PA system. The Operator, the Transit Security Officer and the OCC can make manual announcements to a particular car. These have priority over automatic announcements.

The PEI system has two PEI stations located in the passenger compartment of each car adjacent to the designated wheelchairs areas. When a passenger activates the PEI by pushing a button labeled "Push Button Once to Contact Operator" an audible alarm message "A passenger in car 1234 needs assistance, a passenger needs assistance, a passenger needs assistance" activates in the cab and a visual indication



activates on the Communications Control Panel (CCP) showing the location of the activated PEI. The PEI indicator on the Main Operator's PA control panel also flashes.

At the passenger's PEI station, the call pushbutton indicator flashes to show that the passenger pushed it. When the Operator responds the indicator stops flashing and becomes steadily illuminated. At the same time, a light labeled "ACTIVE" illuminates. If multiple PEIs are activated simultaneously, a party line is established between the passengers and the Operator. If the Operator does not answer the PEI within 13 seconds, the call is directed to the OCC and communication with the Passenger PEI station is initiated. OCC to PEI station communication is indicated by a flashing OCC indicator light on the PEI station and on the Main Operator's PA control panel. All PA and PEI communications are recorded and saved for 72 hours.

A schematic diagram of the cars is included as Appendix B.

## Section 2 OVERVIEW OF EMERGENCY PREPAREDNESS AT RTDC

## 2.1 THE REGIONAL TRANSPORTATION DISTRICT COMMUTER RAILROAD SAFETY COMMITMENT

### THE RTDC SAFETY COMMITMENT

Our most important commitment is to the safety and security of our passengers, our employees and the general public. Therefore safety is always our first priority. Compliance with this commitment is the responsibility of every employee and every contractor acting on our behalf and a condition of their employment or contract.

To fulfill this commitment:

- We will foster a culture where safety is the most important factor in everything we do.
- We believe all injuries and accidents are preventable and will continuously improve our safety processes and performance to prevent them.
- We will provide safety programs, training and equipment that enable employees to avoid accidents and injuries.
- We will provide the resources and tools to eliminate or safeguard against all known hazards.

## 2.2 RTDC EMERGENCY MANAGEMENT ORGANIZATION

The DTO General Manager is responsible for the overall direction and oversight of emergency preparedness at RTDC. The General Manager has delegated responsibility for the day-to-day management of emergency preparedness to the Chief Transportation Officer (CTO). As a part of that responsibility, the CTO serves as the Chairperson of the Emergency Management Task Force (EMTF). In addition to the CTO, the permanent members of the EMTF are the Chief Engineer, the Chief Mechanical Officer and the Chief Safety Officer. Other DTO and RTD staff and external personnel may be assigned to the EMTF as necessary.

The EMTF is a cross-functional team of senior managers representing functions that have key all-hazard emergency preparedness responsibilities within RTDC. In general, the EMTF is responsible for the planning and response to both foreseen and no-notice emergency events.

Specific EMTF responsibilities are to:

- Establish companywide emergency preparedness plans and policies.
- Establish either standing or ad hoc committees as required to accomplish emergency preparedness tasks.
- Ensure that the necessary resources are available to support emergency preparation and recovery. Oversee the organization's response to and recovery from major events.

In addition to the activities required to prepare for and respond to specific events, the EMTF will meet quarterly or as otherwise directed by the GM to:

- Oversee an on-going process of reviewing and auditing emergency preparedness plans (including this plan) and activities to verify that they remain effective and up to date.
- Direct the establishment of new plans and procedures as needed.
- Review the status of Corrective Action Plans (CAPs) from prior events (see Section 7.1.4 – Critique and Debriefing)
- Oversee the training of both internal and external personnel required by 49 CFR 239.
- Oversee the planning and execution of emergency preparedness drills and exercises including at least one annual full-scale passenger train emergency drill.
- Direct other major emergency preparedness initiatives as needed.

## **2.3 RESPONSE TO PASSENGER TRAIN EMERGENCIES**

The Operations Control Center has the primary responsibility for the initial operational response to passenger train emergencies including:

- Communicating with on-board and field personnel to assess the situation as quickly and as accurately as possible.
- Taking the necessary immediate actions to protect life safety and the safety of the operation including applying track protection, de-energizing traction power and authorizing train evacuations in accordance with the RTDC Passenger Train Evacuation Guidelines (see Section 2.4 and Appendix H).
- Notifying emergency response agencies, DTO and RTD staff and other entities (e.g. BNSF, Amtrak, UPRR) as dictated by the nature of the event.
- Coordinating the on-going response to the event by maintaining communication with on-scene personnel and RTDC management and in consultation with them determining the actions needed to best support the response.
- To the extent possible maintaining railroad operations in areas not directly affected by the event including notifying other trains delayed or otherwise affected by the emergency of the nature of the situation, expected delays and any operational changes made necessary by the emergency.

The Operator is responsible for:

- Initiating an emergency radio transmission.
- Providing protection as required by RTDC Operating Rules. Establishing and maintaining communications with the OCC.
- Conducting an initial assessment of the situation and providing accurate information to the OCC including the locations of any known passengers with disabilities (see Section 10). Ensuring the safety of customers and keeping them informed of the situation.
- Acting as the Railroad Operations Commander until relieved of this responsibility by supervision.

- Coordinating the evacuation of the train if necessary in accordance with the RTDC Passenger Train Evacuation Guidelines (see Section 2.4 and Appendix H).
- Provide direction to other employees and passengers who are available to assist.

Transit Security Officers (TSOs) are responsible for:

- Initiating an emergency radio transmission if the Operator is unable to.
- Providing whatever immediate assistance they can render to customers, Operators, company officials and emergency responders. In particular, TSOs will make it a priority to provide assistance to any passengers with disabilities (see Section 10).
- Providing flag protection if so directed by the Operator or OCC.
- Assisting in the evacuation of the train if necessary in accordance with the RTDC Passenger Train Evacuation Guidelines (see Section 2.4 and Appendix H).
- Acting as the Railroad Operations Commander if so designated by the OCC.
- Otherwise, coordinating with and following the direction of the designated Railroad Operations Commander.

On-scene Transportation Supervisors are responsible for:

- Providing whatever immediate assistance they can render to customers, train Operators, company officials and emergency responders. In particular, RTDC employees will make it a priority to provide assistance to any passengers with disabilities (see Section 10).
- Acting as the Railroad Operations Commander if so designated by the OCC.
- Otherwise, coordinating with and following the direction of the designated Railroad Operations Commander.

The Railroad Operations Commander is responsible for:

- Making initial and on-going assessments of the situation and providing information to the Incident Commander and the OCC on the status of the incident.
- Ensuring that all appropriate action is taken to ensure the safety of all persons (employees, customers, customers with disabilities, emergency responders and the general public) at the scene of the incident.
- Recommending to the IC or the OCC actions to mitigate the impact of the incident, move disabled equipment, accommodate displaced customers and restore normal service.
- Represent the railroad in the development of the Incident Action Plan (IAP).
- Communicating the IAP to railroad personnel and coordinating the required railroad actions.
- Regularly updating the OCC and senior management of the status at the scene and providing estimates of the time required to complete key tasks associated with the restoration of service.

Other RTDC employees, whether on or off duty, who are on trains or at the scene of an emergency are responsible for:

- Providing whatever immediate assistance they can render to customers, train Operators, company officials and emergency responders. In particular, RTDC employees will make it a priority to provide assistance to any passengers with disabilities (see Section 10).
- As soon as possible, identifying themselves to the Operator or senior officer on the scene and following their instructions and the instructions of emergency responders. If critical personnel are injured or otherwise unable to fulfill their duties, other company employees may be used if they are qualified for the tasks required.



## **2.4 PASSENGER TRAIN EVACUATION GUIDELINES**

Guidance for managing situations where passengers must be moved from a car or train in circumstances other than a normal discharge at a station are contained in the Passenger Train Evacuation Guidelines included as Appendix H. Passengers may need to be evacuated from a car or train for many reasons such as a disabled train, a prolonged service disruption or an immediate threat to passenger safety. Since each situation is unique the guidelines are intended to be applied with sound judgment in light of the specific circumstances of each event.

Evacuations present their own risks and can have adverse impacts on passengers, responders and the operation. Therefore, evacuating passengers from a train will be done only when there is not a feasible alternative. Unless circumstances make it an absolute necessity, no evacuation should be initiated without notification to and approval from the OCC. Whenever possible evacuations should not be initiated until first responders are on the scene. In any case, when deciding whether to evacuate, how to evacuate and while conducting an evacuation operation, the first priority must always be passenger safety followed by passenger convenience and comfort.



## Section 3 COMMUNICATION

### 3.1 ON-BOARD PERSONNEL

#### 3.1.1 Situational Assessment

Upon becoming aware of a potential on-board emergency, the Operator or other on-board personnel including Transit Security Officers must:

- Immediately notify the Dispatcher that there is a possible on-board emergency.
- Quickly make an accurate assessment of the situation by communicating with the passengers involved and/or observing the reported condition in person or on the cab CCTV monitor. As noted in Section 1.4.6.11, the Operator can select any one of the eight camera views available per car (four in the passenger area of the car interior). It should be noted here that both the OCC and SCC can also access the CCTV camera views. Determine the following information, to the extent practical:
  - The nature of the emergency, including whether there are any injuries or illnesses.
  - The type of emergency assistance needed, if any.
  - The location and condition of the train and any condition affecting the movement of trains.
  - If an evacuation may be necessary:
    - The approximate number of passengers and whether there are any known persons with disabilities onboard that may require assistance and their location (see Section 10).
    - Whether the train is at a passenger station, on an embankment, in a cut, or on an elevated structure that will be a factor in the evacuation.
- A description of any condition that may jeopardize the safety or health of the passengers including, but not limited to: 1) fire, fumes, or smoke, 2) lack of ventilation, 3) unruly or uncontrollable passengers, 4) excessive heat or cold, 5) excessive crowding, 6) lack of lighting, 7) security related situations.
- Any other information pertinent to responding to the emergency.

#### 3.1.2 Notification of the OCC

After the initial notification to the Dispatcher, the on-board personnel must contact the Dispatcher and provide a report as specified in Situational Assessment above. The preferred method for initial and follow up communication is the train radio, however the report must be made by any person by any means necessary including the provided portable radio or personal mobile phone. After the initial reports, whenever possible, lengthy communications should be conducted by telephone leaving the radio available for other communications.

#### 3.1.3 Communication with Passengers

As soon as practical, timely and accurate information must be provided to customers. Clear and frequent communication with customers can help reduce passenger distress and the likelihood of panic. It can also help ensure their cooperation and compliance with instructions. The Operator has the primary responsibility to make announcements to customers; however, the Transit Security Officer, supervisory employees or OCC personnel (see Section 1.4.6.11) must ensure that announcements are made in the event the operator cannot do so.

Customers should be informed of:

- the nature of the situation;
- the preparations customers should make if an evacuation is anticipated;
- any immediate actions required by customers such as evacuating one or more cars;
- actions being taken by the railroad to respond to the emergency;
- if known, the expected duration of the situation or the amount of time until emergency responders arrive at the scene.

Announcements must be concise and delivered in a manner that does not cause unnecessary concern or panic.

If possible on-board personnel should confirm that announcements are received in all cars of the train. If it is known that the PA system is malfunctioning, verbal announcements must be made in the affected cars.

Customers must be regularly updated on the status of the situation. At a minimum, an update must be provided at least every 10 minutes even if there has been no change in status.

## **3.2 OPERATIONS CONTROL CENTER**

### **3.2.1 Notifications by the Operations Control Center**

Upon being advised of a passenger train emergency, OCC Personnel must make notifications as required by the RTDC Standard Operating Procedure - Emergency Notifications (Appendix K). Notifications must be made in priority order per the Emergency Notification List. The Dispatcher has the primary responsibility for making proper notifications to emergency responders, RTD and RTDC officials, parallel operations, regulatory agencies and others with a need to know. However, other OCC personnel, supervisory employees or SCC personnel must ensure that notifications are made in the event the Dispatcher cannot do so.

The Operations Control Center Supervisor is responsible for maintaining the Emergency Notification List so that it is always accurate and up to date.



## Section 4 EMPLOYEE TRAINING AND QUALIFICATION

## 4.1 ON-BOARD PERSONNEL

The following personnel have on-board duties and may be called upon to respond to a passenger train emergency:

- Operators – whose duties include:
  - operating trains in a safe and efficient manner in accordance with published schedules;
  - adhering to the operating rules;
  - monitoring passengers boarding and alighting at stations;
  - enabling and disabling the passenger-door controls and/or opening and closing the doors at stations from the cab;
  - monitoring the radio, and reporting any unusual conditions to the dispatcher;
  - responding to calls on the passenger emergency intercom;
  - responding to any on-board emergency situation including evacuations of customers; and
  - making announcements on the train to keep passengers informed of unusual conditions.
- Transit Security Officers – whose duties include:
  - responding to any on-board emergency situation including evacuations of customers;
  - making announcements on the train to keep passengers informed of unusual conditions if the Operator is unable.
  - providing flag protection as directed by the Operator or OCC;
  - security support for train operators;
  - enforcement of RTD rules and regulations, and other applicable laws;
  - accident and incident reporting, including cooperation with all federal, state and local law enforcement personnel;
- Transportation Supervisors - whose duties include:
  - monitoring train operations in the field and proactively addressing any issues to improve safety, reliability, comfort and cleanliness;
  - reporting unusual conditions and observed defects to the dispatcher;
  - supervising operators;
  - fitness for duty checks;
  - conducting operational tests;
  - answering customers' questions and providing directions;
  - responding to reports of disabled trains and other emergencies including evacuations of passenger trains; and
  - troubleshooting and overcoming vehicle problems.

All on-board personnel will receive training as required by 49 CFR 239 as follows:

Operators and Transportation Supervisors must successfully complete the RTDC Emergency Preparedness Training for Operators course (see Appendix C for the full course description and course outline) that includes:

- Overview of 49 CFR 239 requirements
- Overview of the RTDC Emergency Preparedness Plan including the RTDC emergency management structure and protocols for a passenger train emergency
- Equipment familiarization (supplements Operator Qualification Training):
- Situational awareness:
- Passenger Evacuation:
- Emergency communication:
- Coordination of functions:

Transit Security Officers must successfully complete the RTDC Emergency Preparedness Training for On-Board Personnel course (see Appendix D for the full course description and course outline) that includes:

- Overview of the Federal requirements at 49 CFR 239
- Overview of the RTDC Emergency Preparedness Plan including the RTDC emergency management structure and protocols for a passenger train emergency
- Basic railroad safety on and about tracks and rolling stock
- Overhead Catenary System safety
- Equipment familiarization:
- Situational awareness:
- Emergency communication:
- Coordination of functions:
- Flagging

## **4.2 CONTROL CENTER PERSONNEL**

The following titles have duties in the Operations Control Center and may be called upon to respond to a passenger train emergency.

- Dispatchers - whose duties include:
  - Overseeing all rail movement within an assigned dispatching district.
  - Remote control of switches and signals.
  - Coordinating and controlling of maintenance activities on the ROW.
  - Coordinating with RTD Security Personnel.
  - Coordinating alternate transportation service in the event of train service disruptions.
  - Communicating with passengers over the Passenger Emergency Intercom when the Operator is unable to respond or during an emergency.
  - When necessary, observing on-board conditions via the on-board CCTV system
  - Disconnecting and connecting traction power as required for revenue service, maintenance and emergency response.
  - Recording and reporting all incidents that occur on his/her assigned shift.

- Notifying and coordinating internal and external emergency responders and the activities associated with mitigating emergencies.
- OCC Supervisor and the Deputy OCC Supervisors, whose duties include:
  - The same duties as Dispatchers.
  - Overseeing all activities in the OCC.

Emergency response procedures for the OCC are contained in the RTDC OCC Standard Operating Procedure – Guidance for Dispatchers for Handling Passenger Train Emergencies (Appendix K). These instructions cover internal communication between the OCC and other RTDC functions whenever an imminent potential or actual emergency exists and external communications between the OCC and emergency responders and adjacent modes of transportation.

All OCC personnel will receive training as required by 49 CFR 239 as follows:

- Dispatchers and OCC Supervisors - In addition to the training required to qualify for their assigned positions, Dispatchers and OCC Supervisors must successfully complete the RTDC Emergency Preparedness Training for Dispatchers course (see Appendix E for the course description and course outline). This program covers the following elements:
  - RTDC Emergency Preparedness Procedures – Training on the RTDC procedures and the Federal requirements governing response to passenger train emergencies with emphasis on the responsibilities of OCC personnel.
  - Territory Familiarization – Training to qualify personnel on the characteristics of their assigned dispatch territories with a particular emphasis on emergency response related characteristics including Special Circumstance locations (see Section 6), and wayside access for responders and parallel operations that may affect emergency response. Territory familiarization will be accomplished by a combination of train, high rail rides and site visits supported by study of physical characteristics maps and reference material.
  - Situational Assessment – Procedures for evaluating the nature, scope and severity of passenger train emergencies and maintaining awareness as the situation evolves including information to aid emergency personnel. This includes the use of on-board CCTV to remotely observe on-board conditions in real time.
  - Internal Communication – Procedures for communicating with other OCC and SCC personnel to coordinate functions for an effective response to a passenger train emergency.
  - External Communication – Procedures for establishing and maintaining external communications between the OCC and emergency responders and adjacent modes of transportation. Procedures for communicating with passengers using the on-board PA system to make announcements and procedures for communication with passengers on the Passenger Emergency Intercom whenever necessary.
  - Notifications – Protocols for making proper notification to emergency response agencies, RTD and RTDC personnel, adjacent affected transportation modes and regulatory agencies in the event of a passenger train emergency.



### **4.3 TRAINING SCHEDULES**

All RTD/RTDC personnel who require training per this plan will receive initial training within 90 days of their assignment and refresher training at least once every two calendar years. The Human Resources Manager is responsible for maintaining records of all training conducted pursuant to 49 CFR 239 and for tracking the attendance at required training to ensure that all employees remain qualified in a timely manner. Employees who for whatever reason fail to complete the required training will be disqualified until such time as the training is completed.

### **4.4 RTDC TESTING POLICY FOR PASSENGER TRAIN EMERGENCY TRAINING**

It is the policy of RTDC that employees must demonstrate successful completion of each course by passing a written examination with a score of at least 80%. Written examinations must be of sufficient scope and difficulty to reliably evaluate the knowledge and skills of the participants. The test questions must be objective, multiple choice or fill-in-the-blank questions. In addition to the written test, participant evaluations may include skill demonstrations that shall be evaluated on a pass/fail basis. During testing participants must not use reference materials unless the test is evaluating the use of specific reference materials that the participant will realistically use in the performance of their duties.

### **4.5 ON-BOARD PERSONNEL QUALIFICATIONS**

It is the policy of RTDC that all crewmembers will be fully qualified within 90 days of covering an assignment. The RTDC crew assignment system tracks employee qualifications and will not assign a crewmember to a position for which they are not qualified. This includes qualification under part 239.

Since RTDC does not operate any type of non-passenger service and no tenant railroads operate non-passenger (freight) service on RTDC territory, there is no foreseeable circumstance where personnel who are not qualified on Part 239 would be relieving RTDC crews.



## Section 5 JOINT OPERATIONS

## 5.1 JOINT OPERATIONS

RTDC has joint operations only within Denver Union Station, which is used by RTDC trains, Amtrak intercity trains and occasional special moves including BNSF freight locomotives. DUS is an eight track terminal in Downtown Denver. All tracks are at grade level. Six of the tracks are dedicated to commuter rail service and have an overhead catenary system to support the operation of the electric multiple unit trains operated by RTDC. The other two tracks are not electrified and are dedicated to Amtrak or other special movement trains, RTDC dispatches all train movements within the terminal from the RTDC Operations Control Center. Up to 10 RTDC trains per hour enter and leave the terminal 22 hours per day, seven days per week. Two Amtrak trains enter and depart the station daily. Amtrak also occasionally moves trains between their two terminal tracks and a storage track, traversing a short section of RTDC's East Corridor enroute. Amtrak and RTDC have coordinated on emergency procedures for DUS that are included in Appendix K.

The key Amtrak responsibilities in the event of a passenger train emergency involving an Amtrak train in Denver Union Station include:

- Provide on-board personnel who may perform service in RTDC territory with the training and testing necessary to ensure they are qualified on the emergency response procedures applicable in the DUS segment of RTDC territory.
- Provide immediate notification to RTDC of any Amtrak passenger train emergencies occurring on RTDC territory per the established communication protocol.
- During a passenger train emergency, make initial and on-going assessments of the situation and provide information to the RTDC OCC on the status of the incident.
- Take all appropriate action to ensure the safety of all persons (employees, customers, customers with disabilities, emergency responders and the general public) at the scene of the incident.
- Integrate with the Incident Command structure established at the scene.
- Regularly update the OCC of the status at the scene and provide estimates of the time required to complete key tasks associated with the restoration of service.
- Participate in the incident investigation process.

RTDC and Amtrak officials will regularly review the status of emergency plans for DUS to ensure that they remain current and effective.



## Section 6 SPECIAL CIRCUMSTANCES

## 6.1 SPECIAL CIRCUMSTANCES

### 6.1.1 Tunnels

There are no tunnels on RTDC territory of 1000 feet or more in length.

### 6.1.2 Electrification

The entire RTDC system is electrified. When there is any potential hazard from the catenary system such as catenary wires downed at or in close proximity to the site of a passenger train emergency, catenary power must be removed and must remain so until the hazard has been mitigated or the evacuation is completed. If catenary power must be removed the Standard Operating Procedure - De-energizing Power in Emergencies (Appendix K) will apply.

### 6.1.3 Parallel Operations

Both the Burlington Northern Santa Fe and Union Pacific railroads operate parallel to RTDC along various segments of RTDC's alignment (see Table 3). In the event of an emergency situation in an area where there are parallel operations, the Dispatcher must take specific actions to ensure proper notification to adjacent rail modes of transportation. Once the Dispatcher has been notified that an emergency situation has occurred where parallel operations take place, the Dispatcher must make immediate notification to the adjacent users to ensure proper re-routing and to minimize the likelihood of further complications at the emergency location. If practical, the Dispatcher may request assistance from adjacent rail modes of transportation with regard to evacuation procedures and/or passenger safety concerns.

RTDC on-board personnel are trained to provide flag protection on the tracks of parallel operators in the event that an RTDC accident fouls the adjacent track of another railroad.

*Table 3*






<u>RTDC Subdivision</u>	<u>Adjacent Railroad</u>	<u>Division</u>	<u>Subdivision</u>	<u>From MP</u>	<u>To MP</u>
East Corridor	UPRR	Denver	Greeley	0.43	2.05
East Corridor	UPRR	Denver	Limon	629.53	637.33
Northwest Electrified Segment	BNSF	Powder River	Front Range	0.39	5.90
Gold Line	UPRR	Denver	Moffat Tunnel	4.34	6.53
Northwest Electrified Segment	UPRR	Denver	Moffat Tunnel	3.32	3.53
Gold Line	BNSF	Powder River	Golden	5.04	10.83

As a component of mutual emergency notification protocols, Operators of parallel rail operations are provided with RTDC emergency contact information. The emergency contacts for all parallel operators are included in Appendix K – RTDC Standard Operating Procedure – Emergency Notifications.

#### 6.1.4 Other Locations

Moffat Subdivision Bridge - MP G6.73	
<b>Description/Physical Characteristics</b>	The Moffat Subdivision Bridge is a pre-stressed concrete bulb-tee girder structure that spans three (3) UPRR tracks. The bridge is 832 feet long, 44 feet high and carries two direct fixation tracks with 2 ft-6 in. concrete walkways protected by 42-inch high fences on the north and south sides of the tracks.
<b>Responder Access</b>	<p>Denver Transit Operators and Arvada Fire Department have identified two access points for the Moffat Subdivision Bridge</p> <ul style="list-style-type: none"> <li>First Access Point: This access is located 967 feet south of the intersection of 60th Ave &amp; Sheridan Blvd Frontage Rd, on Sheridan Blvd Frontage Rd. First responders must drive into the Xcel Energy Private parking lot in order to get to the North side of the Moffat Bridge.</li> <li>Second Access Point: This access point is located 3,110 feet west of the intersection of Ralston Rd Ave &amp; Sheridan Blvd, on Ralston. First responders must drive north another 1,082 feet on the service road and access through Barone Inc. private parking lot.</li> <li>See Picture #1</li> <li>Each of these access points was approved by the Arvada Fire Department</li> <li>In case of an emergency Denver Transit Operators (OCC Dispatcher) must call: UPRR Dispatcher: 1-800-726-1178</li> </ul>
<ul style="list-style-type: none"> <li><b>Pedestrian Egress</b></li> </ul>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the tracks.</p> <p>Also passengers will be evacuated through each end of the bridge:</p> <ul style="list-style-type: none"> <li>The eastern end of the bridge can be reached by heading south on Frontage Road to the immediate west of Sheridan Boulevard and West 60th Avenue. A 44-inch wide emergency access gate leads to the track way. It is approximately 1000 feet at a 4% incline to the midpoint of the bridge.</li> <li>The western end of the bridge can be reached by heading north at the intersection of Ralston Road/Ralston Frontage Road ( the intersection is 0.20 miles east of Lamar Street and Ralston Road) and following the Ralston Frontage Road for 0.22 miles. A 44-inch wide emergency access gate leads to the track way. It is approximately 1000 feet at a 4% incline to the midpoint of the bridge.</li> </ul>
<b>Points of Assembly</b>	<ul style="list-style-type: none"> <li>Eastern end - Sheridan Frontage Road grass median near Xcel Energy parking lot.</li> <li>Western end - Off the railroad right-of-way near the railroad signal house and adjacent to the Ralston Road Overpass.</li> </ul>



<p><b>Special Evacuation Procedures</b></p>	<ul style="list-style-type: none"> <li>• Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>• Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>• If catenary power must be removed the SOP De-energizing Power in Emergencies (Appendix K) will apply.</li> </ul> <p><b>Note: Arvada Fire Department will evacuate only injured passengers with their rescue ladder, all other passengers will follow DTO protocols and evacuate the bridge on each end.</b></p>
<p><b>Emergency Response Equipment/Features</b></p>	<ul style="list-style-type: none"> <li>• In case of an emergency on the train, Adams Fire Department will use:             <ul style="list-style-type: none"> <li>○ 1 Fire Engine</li> <li>○ 1 Fire Truck (Ladder Truck)</li> <li>○ 2 Ambulances</li> <li>○ 15 Firefighters</li> <li>○ 4 Paramedics</li> <li>○ 1 Battalion Chief</li> </ul> </li> </ul>
<p><b>Picture #1</b></p> <p><b>Access Points</b></p> <p> <b>Bridge End Access/Assembly Area</b></p> <p> <b>First Access</b></p> <p> <b>Second Access</b></p> <p> <b>First Responders Access Route</b></p>	

Ralston Creek Bridge - MP G7.07	
<b>Description/Physical Characteristics</b>	The Ralston Creek Bridge is a pre-stressed concrete box girder structure that spans Ralston Creek. The bridge is 273 feet long and carries two direct fixation tracks with 2 ft-6 in. concrete walkways protected by a 42-inch high fence on both sides of the track. The bridge runs parallel to the BNSF Railway for its entire length.
<b>Responder Access</b>	<p>Denver Transit Operators and Arvada Fire Department have identified one access point for the Ralston Creek Bridge</p> <ul style="list-style-type: none"> <li>• <b>First Access Point:</b> This access is located 200 feet south of the intersection of Ralston Rd &amp; Lamar St, on Lamar St. First responders must drive into the Lamar Industrial Parkway parking lot in order to get to the west side of the Ralston Creek Bridge.</li> <li>• <b>See Picture #1.</b></li> <li>• <b>This access point was approved by the Arvada Fire Department.</b></li> <li>• <b>In case of an emergency Denver Transit Operators (OCC Dispatcher) must call: BNSF Dispatcher: 1-817-867-7094.</b></li> </ul>
<b>Pedestrian Egress</b>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the tracks.</p> <p>Also passengers will be evacuated through each end of the bridge:</p> <ul style="list-style-type: none"> <li>• The eastern end of the bridge can be reached by heading north at the intersection of Ralston Road/Ralston Frontage Road ( located 0.20 miles east of Lamar Street and Ralston Road) and following the Ralston Frontage Road for 0.22 miles. A 44-inch wide emergency access gate leads to the trackway. Also, apparatuses capable of navigating steep or cross-sloped terrain can access the bridge via the Ralston Road Overpass embankment.</li> <li>• The western end of the bridge can be reached via the Lamar Street grade crossing. A 2 ft-6 in. walkway is provided from the crossing to the bridge. It is approximately 1500 feet on a 1.3% decline to the western limits of the bridge.</li> </ul>
<b>Points of Assembly</b>	<ul style="list-style-type: none"> <li>• Eastern end- Off of the railroad right-of-way near the railroad signal house and adjacent to the Ralston Road Overpass.</li> <li>• Western end – The railroad signal house for the Lamar Street highway-rail grade crossing.</li> </ul>
<b>Special Evacuation Procedures</b>	<ul style="list-style-type: none"> <li>• Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>• Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>• If catenary power must be removed the SOP De-energizing Power in</li> </ul>



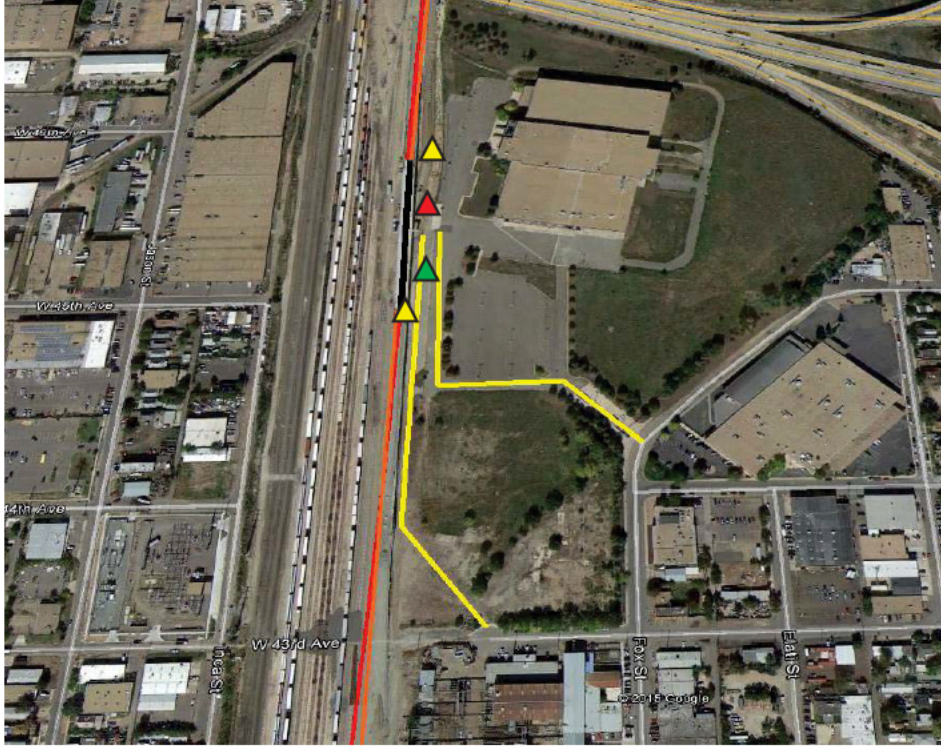
	<p>Emergencies (Appendix K) will apply.</p> <p><b>Note: Arvada Fire Department will evacuate only injured passengers through their rescue ladder, all other passenger will follow DTO protocols and evacuate the bridge on each end.</b></p>
<p><b>Emergency Response Equipment/Features</b></p>	<ul style="list-style-type: none"> <li>• In case of an emergency on the train, Adams Fire Department will use: <ul style="list-style-type: none"> <li>○ 1 Fire Engine</li> <li>○ 1 Fire Truck (Ladder Truck)</li> <li>○ 2 Ambulances</li> <li>○ 15 Firefighters</li> <li>○ 4 Paramedics</li> <li>○ 1 Battalion Chief</li> </ul> </li> </ul>
<p><b>Picture #1</b></p> <p><b>Access Points</b></p> <p> Bridge End Access/Assembly Area</p> <p> First Access</p> <p> First Responders Access Route</p>	

South Platte River Bridge - MP NW0.67	
<b>Description/Physical Characteristics</b>	The South Platte River Bridge is a pre-stressed concrete bulb-tee girder structure that spans the South Platte River and four BNSF Railway tracks. The bridge is 1,059 feet long, 44 feet high and carries two direct fixation tracks with 2 ft-6 in. concrete walkways protected by 42-inch high fences on the north and south sides of the tracks.
<b>Responder Access</b>	<p>Denver Transit Operators and the Denver Fire Department have identified two access points along the length of the South Platte River Bridge, these access points are described as follows:</p> <ul style="list-style-type: none"> <li>• <u>First Access:</u> This access is located on the intersection of 31<sup>st</sup> &amp; Fox St. on the roundabout.</li> <li>• <u>Second Access:</u> This access is located 130 feet north of the intersection of 31<sup>st</sup> &amp; Fox St. on the roundabout. <b>This is a service and maintenance stairway and not a Passenger Emergency Egress. Only the Denver Fire Department will be allowed to use the stairway to access the bridge during an emergency.</b></li> <li>• <u>Third Access:</u> This access is located on the East/South corner of the Denver Police Training Center parking lot.</li> <li>• <b>See Picture #1</b></li> <li>• <b>Each of these access points was approved by the Denver Fire Department.</b></li> <li>• <b>Because of the proximity of both Union Pacific &amp; Burlington North tracks at each end of the bridge, Denver Transit Operators (OCC Dispatcher) must contact:</b> <ul style="list-style-type: none"> <li>○ <b>UPRR Dispatcher: 1-800-726-1178</b></li> <li>○ <b>BNSF Dispatcher: 1-817-867-7094</b></li> </ul> </li> </ul>
<b>Pedestrian Egress</b>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the tracks.</p> <p>Also passengers will be evacuated through each end of the bridge:</p> <ul style="list-style-type: none"> <li>• The eastern end of the bridge can be accessed via an emergency access gate underneath Wewatta Street Bridge near the intersection of West 29th Avenue and Fox Street. This gate provides direct access to the track way. It is approximately 1400 feet on a 3.2% incline to the midpoint of the bridge.</li> <li>• The western end of the bridge can be accessed via the Fire Department Access Road that runs in the back of the City and County of Denver Police Traffic Operations and Training Facility. From the grade crossing it is approximately 1700 feet on a 4.00% grade to the midpoint of the bridge.</li> </ul>









Jersey Cut-Off Bridge - MP NW1.90	
<b>Description/Physical Characteristics</b>	The Jersey Cut-Off Bridge is a three-cell, cast-in-place, post-tensioned box girder structure that spans a single BNSF Railway track. The bridge is 507 feet long, 44 feet high and carries two direct fixation tracks with 2 ft-6 in. concrete walkways protected by 42-inch high fences on the north and south sides of the tracks.
<b>Responder Access</b>	<p>Denver Transit Operators and the Denver Fire Department have identified two access points along the length of the Jersey Cut-Off Bridge, these access points are described as follows:</p> <ul style="list-style-type: none"> <li>• <u>First Access Point:</u> This access is located 200 feet north of the intersection of 44<sup>th</sup> Ave &amp; Fox. Then first responders need to drive about 1,310 feet North/East toward the Jersey Cut-Off Bridge South/West end.</li> <li>• <u>Second Access Point:</u> This access point is located 200 feet west of 43<sup>rd</sup> Ave &amp; Fox St, on Fox St. The first responders need to drive about 1,300 feet north to the Jersey Cut-Off Bridge South/West end.</li> <li>• See Picture # 1</li> <li>• Each of these access points was approved by the Denver Fire Department.</li> <li>• <b>Note: The service and maintenance stairways along the bridge alignment are not intended for Passenger Emergency Egress. Only the Denver Fire Department will be allowed to use these stairways to access the bridge during an emergency. Because of the proximity of both Union Pacific &amp; Burlington North Tracks at one side of the bridge, Denver Transit Operators (OCC Dispatcher) must contact:</b> <ul style="list-style-type: none"> <li>○ UPRR Dispatcher: 1-800-726-1178</li> <li>○ BNSF Dispatcher: 1-817-867-7094</li> </ul> </li> </ul>
<b>Pedestrian Egress</b>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the tracks.</p> <p>Also passengers will be evacuated through each end of the bridge:</p> <ul style="list-style-type: none"> <li>• The bridge can be accessed via the 41<sup>st</sup> and Fox Station's West 42<sup>nd</sup> Avenue Entrance. It is approximately 1760 feet on a 4% incline from the station to the midpoint of the bridge and an additional 840 feet down a 4% decline to the base of the western end</li> </ul>
<b>Points of Assembly</b>	<ul style="list-style-type: none"> <li>• On the 41<sup>st</sup> and Fox Street Station Platform. An "Assembly Area" sign is posted at the end of the station indicating where passengers need to gather.</li> </ul>

<p><b>Special Evacuation Procedures</b></p>	<ul style="list-style-type: none"> <li>• Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>• Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>• If catenary power must be removed the SOP De-energizing Power in Emergencies (Appendix K) will apply.</li> </ul> <p><b>Note: Denver Fire Department will evacuate only injured passengers through their rescue ladder, all other passenger will follow DTO protocols and evacuate the bridge on each end.</b></p>
<p><b>Emergency Response Equipment/Features</b></p>	<ul style="list-style-type: none"> <li>• In case of an emergency on the train, Denver Fire Department will use: <ul style="list-style-type: none"> <li>○ 3 Fire Engines</li> <li>○ 2 Fire Trucks (Ladder Trucks)</li> <li>○ 1 Ambulance</li> <li>○ 15 Firefighters</li> <li>○ 2 Paramedics</li> <li>○ 2 District Chiefs</li> </ul> </li> </ul>
<p><b>Picture #1</b></p> <p><b>Access Points</b></p> <p>▲ Bridge End Access</p> <p>▲ First Access</p> <p>▲ Second Access</p> <p>— First Responders Access Route</p>	 <p>The aerial map shows a bridge crossing a river. A yellow line indicates the First Responders Access Route, starting from the bottom right and moving towards the bridge. Three triangles mark access points: a yellow triangle at the bridge end, a red triangle for the first access point, and a green triangle for the second access point. The map also shows surrounding streets and buildings.</p>





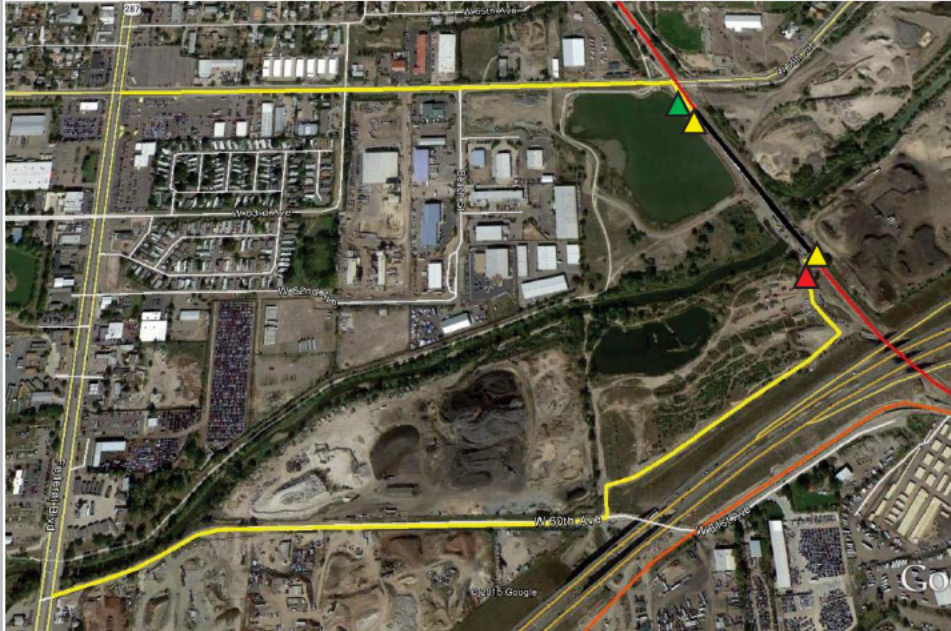
Utah Junction Bridge - MP NW3.11	
<b>Description/Physical Characteristics</b>	The Utah Junction Bridge is a pre-stressed concrete bulb-tee girder structure that spans six BNSF and UPRR tracks. The bridge is 2505 feet long, 44 feet high and carries two direct fixation tracks with 2 ft-6 in. Concrete walkways, protected by 42-inch high fences on the north and south sides of the tracks.
<b>Responder Access</b>	<p>Denver Transit Operators and Adams County Fire Department have identified two access points for the Utah Junction Bridge</p> <ul style="list-style-type: none"> <li>• <u>First Access Point:</u> This access is located 2,561' west of the intersection of 56<sup>th</sup> Ave &amp; Bannock St. on 56<sup>th</sup> Ave.</li> <li>• <u>Second Access Point:</u> This access point is located north of the intersection of 56<sup>th</sup> Ave &amp; the Utah Junction Bridge, on 56<sup>th</sup> Ave right before crossing UPRR tracks.</li> <li>• <b>Each access point was approved by the Adams County Fire Department.</b></li> </ul> <p><b>Note: The service and maintenance stairways along the bridge alignment are not intended for Passenger Emergency Egress. Only the Adams County Fire Department will be allowed to use these stairways to access the bridge during an emergency.</b></p> <ul style="list-style-type: none"> <li>• <b>In case of an emergency Denver Transit Operators (OCC Dispatcher) must call: UPRR Dispatcher 86: <u>1-800-726-1178</u></b></li> </ul>
<b>Pedestrian Egress</b>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the tracks.</p> <ul style="list-style-type: none"> <li>• Passengers will be evacuated through each end of the bridge.</li> <li>• The North end of the bridge can be accessed via Pecos Station.</li> <li>• The South end of the bridge can be accessed via CRMF building North-End.</li> </ul>
<b>Points of Assembly</b>	<ul style="list-style-type: none"> <li>• The northern end – Off of the railroad right-of-way and through a 44-inch pedestrian gate where the wall meets the bridge. An “Assembly Area” sign is posted at the end of the bridge indicating where passengers need to gather.</li> <li>• The southern end – Off of the railroad right-of-way and through a 44-inch pedestrian gate where the wall meets the bridge. An “Assembly Area” sign is posted at the end of the bridge indicating where passengers need to gather.</li> </ul>
<b>Special Evacuation Procedures</b>	<ul style="list-style-type: none"> <li>• Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>• Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>• If catenary power must be removed the SOP De-energizing Power in Emergencies (Appendix K) will apply.</li> </ul> <p><b>Note: Adams County Fire Department will evacuate only injured passengers</b></p>





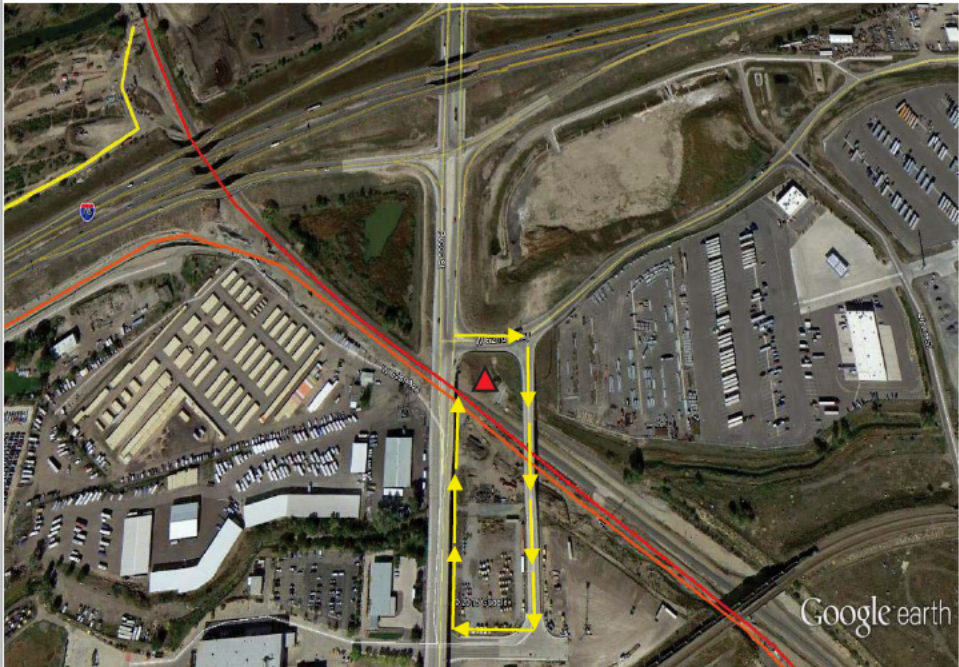
	<p>through their rescue ladder, all other passenger will follow DTO protocols and evacuate the bridge on each end.</p>
<p><b>Emergency Response Equipment/Features</b></p>	<ul style="list-style-type: none"> <li>• In case of an emergency on the train, Adams Fire Department will use: <ul style="list-style-type: none"> <li>○ 1 Fire Engine</li> <li>○ 1 Fire Ladder Truck</li> <li>○ 2 Ambulances</li> <li>○ 15 Firefighters</li> <li>○ 4 Paramedics</li> <li>○ 1 Battalion Chief</li> </ul> </li> </ul>
<p><b>Picture #1</b></p> <p><b>Access Points</b></p> <p> <b>Bridge End Access/Assembly Area</b></p> <p> <b>First Access</b></p> <p> <b>Second Access</b></p>	

Clear Creek Bridge - MP NW4.35	
<b>Description/Physical Characteristics</b>	The Clear Creek Bridge is a pre-stressed concrete bulb-tee girder structure that spans Clear Creek. The bridge is 947 feet long, 44 feet high and carries one direct fixation track with 2 ft-6 in. concrete walkways protected by a 42-inch high fence on both sides of the track. The bridge runs parallel to the BNSF Railway for its entire length.
<b>Responder Access</b>	<p>Denver Transit Operators and Adams County Fire Department have identified two access points for the Clear Creek Bridge</p> <ul style="list-style-type: none"> <li>• <b>First Access Point:</b> This access is located 4,874 feet east of the intersection of 60<sup>th</sup> Ave &amp; Federal Blvd, on 60<sup>th</sup> Ave. First responders must drive 2,786' East on 60<sup>th</sup> Ave to the gate for the CDOT storage material depot and then drive on their property to the East for another 2,000 feet toward the Clear Creek Bridge South end.</li> <li>• <b>Second Access Point:</b> This access point is located 3,310 feet east of the intersection of 64<sup>th</sup> Ave &amp; Federal Blvd, on 64<sup>th</sup> Ave right before crossing BNSF tracks, then First responders must drive South another 200 feet for the Clear Creek Bridge North end.</li> <li>• <b>See Picture #1</b></li> <li>• <b>Each of these access points was approved by the Adams County Fire Department</b></li> <li>• <b>In case of an emergency Denver Transit Operators (OCC Dispatcher) must call: BNSF Front Range Dispatcher: 1-817-867-7094</b></li> </ul>
<b>Pedestrian Egress</b>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the tracks.</p> <p>Also passengers will be evacuated through each end of the bridge:</p> <ul style="list-style-type: none"> <li>• The southern end of the bridge can be accessed via the bottom of the embankment that runs parallel to Interstate 76. The entrance to this route starts at West 60th Avenue and I-76. A 44-inch wide emergency access gate allows access to the track way.</li> <li>• The northern end of the bridge can be accessed via a maintenance road that runs parallel to the track. The entrance to this route starts at the former 64th Avenue highway-rail grade crossing.</li> </ul>
<b>Points of Assembly</b>	<ul style="list-style-type: none"> <li>• The southern end – Off of the railroad right-of-way and adjacent to the base of the Interstate 76 embankment. An "Assembly Area" sign is posted at the end of the bridge indicating where passengers need to gather.</li> <li>• The northern end – Off of the railroad right-of-way near the former 64th Avenue highway-rail grade crossing. An "Assembly Area" sign is posted at the end of the bridge indicating where passengers need to gather.</li> </ul>











<p><b>Special Evacuation Procedures</b></p>	<ul style="list-style-type: none"> <li>• Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>• Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>• If catenary power must be removed the SOP De-energizing Power in Emergencies (Appendix K) will apply.</li> </ul> <p><b>Note: Adams County Fire Department will evacuate only injured passengers through their rescue ladder, all other passenger will follow DTO protocols and evacuate the bridge on each end.</b></p>
<p><b>Emergency Response Equipment/Features</b></p>	<ul style="list-style-type: none"> <li>• In case of an emergency on the train, Adams Fire Department will use: <ul style="list-style-type: none"> <li>○ 1 Fire Engine</li> <li>○ 1 Fire Ladder Truck</li> <li>○ 2 Ambulances</li> <li>○ 15 Firefighters</li> <li>○ 4 Paramedics</li> <li>○ 1 Battalion Chief</li> </ul> </li> </ul>
<p><b>Picture #1</b></p> <p><b>Access Points</b></p> <p> <b>Bridge End Access/Assembly Area</b></p> <p> <b>First Access</b></p> <p> <b>Second Access</b></p> <p> <b>First Responders Access Route</b></p>	

Pecos Junction Station - MP NW3.91	
<b>Description/Physical Characteristics</b>	Pecos Junction Station, a passenger station located approximately 0.25 miles south of the intersection of Pecos Street and Interstate 76, consists of a 200-ft long island platform with access provided by a grade-separated pedestrian bridge that crosses over one (1) BNSF Railway track and one (1) RTDC track.
<b>Responder Access</b>	<p>Denver Transit Operators and Adams County Fire Department have identified one access points for the Pecos Station:</p> <ul style="list-style-type: none"> <li>• <b>First Access Point:</b> Aurora Fire Department must drive from the intersection of Pecos St &amp; 62<sup>nd</sup> Ave 271 feet east on 63<sup>rd</sup> Ave, 831 feet south on NAME St, 271 feet west until reach UPRR service Rd and another 800 north to the Pecos Station Platform.</li> <li>• <b>See Picture #1</b></li> <li>• <b>This access point was approved by the Adams County Fire Department</b></li> <li>• <b>In case of an emergency Denver Transit Operators (OCC Dispatcher) must call: BNSF Front Range Dispatcher: 1-817-867-7094</b></li> </ul>
<b>Pedestrian Egress</b>	<p>Pecos can be accessed via three pedestrian routes:</p> <ul style="list-style-type: none"> <li>• Route 1 starts at the parking area north of the station at the intersection of 62<sup>nd</sup> Street and Osage Street. A pedestrian bridge that goes over the track provides access to the station platform. An elevator and ramps are provided on the parking area side of the pedestrian bridge. An elevator and stairs are provided on the station platform side of the pedestrian bridge.</li> <li>• Route 2 starts at the intersection of West 61<sup>st</sup> Avenue and “Old” Pecos Street – “Old” Pecos refers to the road that is underneath the Pecos Street overpass structure. A 5 foot wide sidewalk leads directly to the station platform.</li> <li>• Route 3 starts at the intersection of Osage Road and West 61<sup>st</sup> Avenue and proceeds down an embankment, across the inbound track at a pedestrian crossing and to the station.</li> </ul>
<b>Points of Assembly</b>	<p>Three points of assembly are located at:</p> <ul style="list-style-type: none"> <li>• The base of the concrete ramp on the park-and-ride side of the pedestrian bridge.</li> <li>• Underneath the Pecos Street Overpass and off of RTD right-of-way.</li> <li>• The northeast corner of the Osage Road and West 61<sup>st</sup> Avenue intersection.</li> </ul>
<b>Special Evacuation Procedures</b>	<ul style="list-style-type: none"> <li>• Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>• Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>• If catenary power must be removed the SOP De-energizing Power in</li> </ul>

	<p>Emergencies (Appendix K) will apply.</p> <p><b>Note: Adams County Fire Department will evacuate only injured passengers through their rescue ladder, all other passenger will follow DTO protocols and evacuate the bridge on each end.</b></p>
<p><b>Emergency Response Equipment/Features</b></p>	<ul style="list-style-type: none"> <li>• In case of an emergency on the train, Adams Fire Department will use: <ul style="list-style-type: none"> <li>○ 1 Fire Engine</li> <li>○ 1 Fire Truck Ladder Truck</li> <li>○ 1 Ambulance</li> <li>○ 7 Firefighters</li> <li>○ 2 Paramedics</li> <li>○ 1 Battalion Chief</li> </ul> </li> </ul>
<p><b>Picture # 1</b></p> <p><b>Access Point</b></p> <p> <b>First Access</b></p> <p> <b>First Responders Access Route</b></p>	 <p>Google earth</p>



I-70 Bridge - MP E11.63	
<b>Description/Physical Characteristics</b>	The I-70 Bridge is a pre-stressed concrete bulb-tee girder and a continuous curved steel plate girder structure that spans one (1) UPRR track, Airport Boulevard, Pagosa Street and the main lanes and access/exit ramps of Interstate 70. The bridge is 4,653 feet long, 44 feet high and carries one direct fixation track with 2 ft-6 in. concrete walkways protected by 42 inch high fences on both sides of the track.
<b>Responder Access</b>	<p>Denver Transit Operators and Aurora Fire Department have identified multiple access points along the length of the I-70 Bridge, these access points are described as follows:</p> <ul style="list-style-type: none"> <li>• <u>First Access</u>: This access is located 905' west of the intersection of Smith Rd &amp; Airport Blvd on the North side of Smith Rd.</li> <li>• <u>Second Access</u>: This access is located 702' north of the intersection of Smith Rd &amp; Airport Blvd on the West side of Airport Blvd.</li> <li>• <u>Third Access</u>: This access is located at Airport Blvd (Both North Bound and South Bound), this is where the I-70 Bridge crosses over Airport Blvd.</li> <li>• <u>Fourth Access</u>: This access is located at the intersection of East 32<sup>nd</sup> Ave &amp; Pagosa St, also fire department could have access to the Union Pacific automobile parking lot located on the South side of that intersection.</li> <li>• <u>Fifth Access</u>: This access is located 856' North on the intersection of East 32<sup>nd</sup> Ave &amp; Pagosa St on Pagosa St.</li> <li>• <u>Sixth Access Point</u>: This access points is located on the east and west bound of the Interstate 70. However Aurora Fire Department will prefer use the North end of the bridge because of the amount of traffic on the interstate.</li> <li>• <b>See Picture #1</b></li> <li>• <b>Each of these access points was approved by the Aurora Fire Department</b></li> <li>• <b>Because of the proximity to the Union Pacific Train Tracks at one side of the bridge, Denver Transit Operators (OCC Dispatcher) must contact: UPRR Dispatcher: 1-800-726-1178</b></li> </ul> <p><b>Note: There are 4 service and maintenance stairways along the bridge alignment. These stairways are not intended for Passenger Emergency Egress. Only the Aurora Fire Department will be allowed to use these stairways to access the bridge during an emergency.</b></p>
<b>Pedestrian Egress</b>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the track. Passengers will also be evacuated through each end of the bridge.</p> <ul style="list-style-type: none"> <li>• The eastern end of the bridge can be accessed via Smith Road, approximately 0.35 miles west of the intersection of North Airport Boulevard and Smith Road.</li> <li>• The bridge can be accessed via North Airport Boulevard, East 32nd Avenue</li> </ul>

	(460-feet east of North Airport Boulevard), Pagosa Street from East 32nd Avenue to East 32nd Place, the main lanes of Interstate 70 and the eastbound I-70 on-ramp from North Airport Boulevard and the exit ramp (exit 285) from westbound I-70.
<b>Points of Assembly</b>	<ul style="list-style-type: none"> <li>The northern end – Off of the railroad right-of-way where the wall meets the bridge. An “Assembly Area” sign is posted at the end of the bridge indicating where passengers need to gather.</li> <li>The southern end – Off of the railroad right-of-way where the wall meets the bridge. An “Assembly Area” sign is posted at the end of the bridge indicating where passengers need to gather.</li> </ul>
<b>Special Evacuation Procedures</b>	<ul style="list-style-type: none"> <li>Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>If catenary power must be removed the SOP De-energizing Power in Emergencies (Appendix K) will apply.</li> </ul> <p><b>Note: Aurora Fire Department will evacuate only injured passengers through their rescue ladder, all other passenger will follow DTO protocols and evacuate the bridge on each end.</b></p>
<b>Emergency Response Equipment/Features</b>	<ul style="list-style-type: none"> <li>In case of an emergency on the train, Aurora Fire Department will use: <ul style="list-style-type: none"> <li>2 Engine Trucks</li> <li>2 Fire Trucks (Ladder Trucks)</li> <li>2 Ambulance</li> <li>15 Firefighters</li> <li>4 Paramedics</li> <li>1 Battalion Chief</li> </ul> </li> </ul>
<b>Picture #1 - Access</b>  <b>Bridge End Access/Assembly Area</b>  <b>First Access</b>  <b>Second Access</b>  <b>Third Access</b>  <b>Fourth Access</b>  <b>Fifth Access</b>  <b>Sixth Access</b>	

Pena Bridge - MP E19.33	
<b>Description/Physical Characteristics</b>	The Pena Bridge is a pre-stressed concrete bulb-tee girder structure that spans Pena Boulevard. The bridge is 1,953 feet long, 44 feet high and carries two direct fixation tracks with 2 ft-6 in. concrete walkways protected by 42-inch high fences on the east and west sides of the tracks.
<b>Responder Access</b>	<p>Denver Transit Operators and the Denver Fire Department (Denver International Airport Stations) have identified three access points along the length of the Pena Blvd Bridge, these access points are described as follows:</p> <ul style="list-style-type: none"> <li>• <u>First Access</u>: This access is located on Pena Blvd West Bound underneath the bridge, fire rescue trucks can park and set their equipment on Pena Blvd.</li> <li>• <u>Second Access</u>: This access is located on Pena Blvd East Bound underneath the bridge, fire rescue trucks can park and set their equipment on Pena Blvd.</li> <li>• <u>Third Access</u>: This access is located on the middle of Pena Blvd between the East Bound and West Bound. (DIA Fire Department confirmed that they can bring their “Crash 8-wheeled Rescue Truck” in this area.)</li> <li>• Also there are two emergency access roads on the East and West side of the bridge, DIA Police Department can re-route traffic while closing any portion of Pena Blvd.</li> <li>• <b>See Picture # 1</b></li> </ul> <p><b>Note: Each of these access points was approved by the Denver Fire Department.</b></p>
<b>Pedestrian Egress</b>	<p>Evacuation from the bridge can be accomplished via the pedestrian walkways provided on both sides of the tracks.</p> <ul style="list-style-type: none"> <li>• The southern portion of the bridge can be accessed via Pena Boulevard.</li> <li>• The northern portion of the bridge can be accessed via Security Access Road. (The entrance is to the west of Gun Club Road and 78th Avenue.)</li> <li>• Also the Northern portion of the bridge can be accessed via Tibet ST &amp; 78th Ave from Pena Blvd.</li> </ul>
<b>Points of Assembly</b>	<ul style="list-style-type: none"> <li>• The southern end – At the bottom of the embankment near Pena Boulevard.</li> <li>• The northern end –At the bottom of the embankment near Security Access Road.</li> </ul>
<b>Special Evacuation Procedures</b>	<ul style="list-style-type: none"> <li>• Per RTDC Passenger Train Evacuation Guidelines (Appendix H), when circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation.</li> <li>• Unless it is absolutely necessary, no evacuation should be initiated without notifying the OCC and receiving their approval.</li> <li>• If catenary power must be removed the SOP De-energizing Power in Emergencies (Appendix K) will apply.</li> </ul>



	<p><b>Note: Denver Fire Department will evacuate only injured passengers through their rescue ladder, all other passenger will follow DTO protocols and evacuate the bridge on each end.</b></p>
<p><b>Emergency Response Equipment/Features</b></p>	<ul style="list-style-type: none"> <li>• In case of an emergency on the train, Denver Fire Department will use: <ul style="list-style-type: none"> <li>○ 2 Fire Engines</li> <li>○ 1 Ladder Truck</li> <li>○ 1 Ambulance</li> <li>○ 10 Firefighters</li> <li>○ 2 Paramedics</li> <li>○ 1 Battalion Chief</li> </ul> </li> </ul>
<p><b>Picture #1</b></p> <p><b>Access Points</b></p> <p>▲ Bridge End Access/Assembly Area</p> <p>▲ First Access</p> <p>▲ Second Access</p> <p>▲ Third Access</p> <p>Emergency Road</p>	





## Section 7      LIAISON WITH EMERGENCY RESPONDERS

## **7.1 LIAISON WITH EMERGENCY RESPONDERS**

### **7.1.1 Outreach and Engagement with First Responders**

The Chief Safety Officer is responsible for maintaining a contact at each emergency response agency on RTDC's lines. The Chief Safety Officer and other RTDC staff as needed, working through the agency contacts develop and coordinate the inter-agency communication and first responder training necessary to support an effective response to passenger train emergencies.

Specific outreach initiatives include:

- Establishing clear lines of communication between RTDC and response agencies.
- Working with the response agencies to develop the protocols and procedures to handle passenger train emergencies.
- Providing both instruction and self-instructional materials (see 7.1.2 and Appendix F) to the agencies.
- Providing opportunities for first responders to receive hands on training on RTDC rolling stock (see 7.1.2 and Appendix F).
- Joint planning and conducting of emergency simulations (see 7.1.3).
- Including emergency responders in all critiques and debriefings of events and exercises in which they have participated (see 7.1.4 and Appendix I).

### **7.1.2 Plan Distribution**

The RTDC Chief Safety Officer is responsible for distributing applicable portions of the Plan to emergency response agencies in the operating territory. The Plan will be distributed at least once every three years, or whenever there is a material change that affects the railroad's interaction with first responders. The Plan distribution will include documentation concerning RTDC rolling stock and physical characteristics as well as the position titles and telephone numbers of relevant railroad officers to contact regarding the plan.

### **7.1.3 Passenger Train Emergency Response Training Program**

RTDC will provide a training program consisting of an instructor's guide, presentation material and handouts including quick reference information, car diagrams and system maps. The program will cover access to railroad equipment, location of railroad facilities and communication with RTDC (see RTDC Passenger Train Emergency Preparedness Training - Appendix F). RTDC instructors will deliver this program at no cost to local response agencies. RTDC will also provide self-instructional material at the request of the agencies.

### **7.1.4 Emergency Simulations**

RTDC will conduct at least one full-scale emergency simulation annually, in order to improve its capability to execute the emergency preparedness plan under the variety of scenarios that could reasonably be expected to occur, and ensure coordination with all emergency responders who voluntarily agree to participate in the emergency simulation. In addition, RTDC will share significant lessons learned with other local agencies through the established agency contacts.

### 7.1.5 Critique and Debriefing

RTDC will conduct a debriefing and critique session (After Action Review) after each passenger train emergency situation or full-scale simulation to determine the effectiveness of its emergency preparedness plan. The Chief Safety Officer will be responsible for developing a Corrective Action Plan (CAP) to improve or amend the Emergency Preparedness plan and address any other issues that are developed in the critique. The debriefing and critique session shall be conducted within 60 days of the date of the passenger train emergency situation or full-scale simulation. To the extent practicable, all on-board personnel, control center personnel, and any other employees involved in the emergency situation or full-scale simulation will participate in the session either in person or in writing, by a statement responding to questions provided prior to the session, and by responding to any follow-up questions.

RTDC will maintain records of its debriefing and critique sessions at its system headquarters for two calendar years after the end of the calendar year to which they relate, including the following information:

- Date and location of the passenger train emergency situation or full-scale simulation;
- Date and location of the debriefing and critique session; and
- Names of all participants in the debriefing and critique session.



## Section 8 ON-BOARD EMERGENCY EQUIPMENT

## 8.1 ON-BOARD EMERGENCY EQUIPMENT

All RTDC EMUs have the following on-board emergency equipment:

Equipment	Inspection and Repair
<i>Fire Extinguishers:</i> each car is equipped with a fire extinguisher readily available for use. It is located in the Emergency Tool Locker at the F end of the passenger compartment. Instructions for use are displayed on the extinguisher and are contained in the Timetable Special Instructions.	Daily as part of the Calendar Day Mechanical Inspection.  Missing or defective items will be replaced or repaired as needed.
<i>Emergency Tools:</i> each car is equipped with a pry bar, flash light and first aid kit marked by appropriate signage located in the Emergency Tool Locker at the F end of the passenger compartment.	Daily as part of the Calendar Day Mechanical Inspection.  Missing or defective items will be replaced or repaired as needed.
<i>Pantograph Poles:</i> each married pair of cars is equipped with an insulated pantograph pole stored in a dedicated housing unit attached to the side of the “B” car frame, which is utilized to manually retract pantographs away from the catenary wire or unlatch from the down position.	Daily as part of the Calendar Day Mechanical Inspection.  Missing or defective items will be replaced or repaired as needed.
<i>Hand-held Emergency Lighting:</i> all on-board personnel are required to carry a flashlight while performing duty on-board trains.	At the start of the work assignment per RTDC Operating Rule 3-G.
<i>On-board Train Radios:</i> each EMU control cab is equipped with a two way radio.	Daily as part of the Calendar Daily Mechanical Inspection and prior to the start of the Operator’s work assignment or when taking charge of the equipment per RTDC Operating Rule 5-D (9).
<i>Portable Radios:</i> each Operator is equipped with a hand-held portable radio that must be carried while performing duty on-board trains.	Prior to the start of the work assignment or when taking charge of equipment per RTDC Operating Rule 5-D (9).
<i>Passenger Emergency Intercom:</i> each car is equipped with an intercom system that customers can use to communicate with the Operator or with the OCC in the event the Operator is unable to answer the call.	Daily as part of the Calendar Day Mechanical Inspection.
<i>PA System:</i> each car is equipped with a PA system that can be used by the Operator or the OCC to make on-board announcements throughout the train. (See section 1.4.6.11 Rolling Stock.)	Daily as part of the Calendar Day Mechanical Inspection.
<i>CCTV:</i> each car is equipped with an on-board interior CCTV system that enables the Operator, the SCC or the OCC to view activity on the train. . (See section 1.4.6.11 Rolling Stock.)	Daily as part of the Calendar Day Mechanical Inspection.



Equipment	Inspection and Repair
<i>Emergency Ladder/transfer board:</i> each car is equipped with a ladder that can be converted to a transfer board. It is stored in the baggage area adjacent to the vestibule in the A end.	Daily as part of the Calendar Day Mechanical Inspection.



## Section 9 PASSENGER SAFETY INFORMATION



## 9.1 ON-BOARD EMERGENCY EVACUATION INSTRUCTIONS

Each car will have decals located near the main side door entry areas that provide emergency instructions to passengers and decals located near the Emergency Door Release access panels that provide instructions on how to open the side doors in an emergency. These decals are illustrated in Appendix G.

## 9.2 CUSTOMER SAFETY COMMUNICATION PLAN

In addition to the on-board instructions, RTD will provide passenger safety awareness information through a variety of media and activities. The major initiatives designed to either prevent an emergency or mitigate the impact of one are summarized in the chart below.

Information/Messages	Media	Description
Preparing for Emergencies and Train Evacuation Instructions	Televised/Slide Monitor	Emergency messages on board Televised/Slide Monitor.
	On-board Signage	Signage as shown in Appendix G.
	CERT Training	Community CERT volunteers receive “hands-on instruction in assisting in passenger evacuations.
Platform and Station Safety	RTD Website	Platform safety and security information for passengers posted online.
	PA Announcements	Routine safety reminders over station PA system.
	Station Signage	Safety reminders posted at stations.
Dumb Ways to Die	RTD Website	Safety tips for boarding and alighting.
	PA Announcements	Periodic safety reminders over the station PA.
Seasonal Safety Tips	PA Announcements	Safety information for special or seasonal situations such as wintery conditions or special events broadcast over on-board and station PA systems
Trespassing Prevention	Operation Lifesaver Presentations	Support the RTD Operation Lifesaver presentations to school and community groups.
	RTD Website	Online information on the hazards on and around railroad tracks.
Grade Crossing Safety	Operation Lifesaver Presentations	Scheduled Operation Lifesaver presentations to school and community groups.
	RTD Website	Online information on grade crossing safety.



## Section 10 PASSENGERS WITH DISABILITIES

## 10.1 PASSENGERS WITH DISABILITIES

RTDC is committed to compliance with the Americans with Disabilities Act and the requirements of 49 CFR 239 related to persons with disabilities. One part of this commitment is ensuring that RTDC personnel are prepared to assist passengers with disabilities during service disruptions and emergencies. RTDC also recognizes that providing emergency response guidance to persons with disabilities before an emergency occurs can help ensure their safety and comfort in unusual situations.

RTDC will provide training for on-board personnel in how to recognize and respond to the needs of persons with disabilities in an emergency (see the course descriptions in Appendices D, E and F). This includes:

- Directing first responders to persons with disabilities.
- How to communicate with hearing and visually impaired persons.
- Arranging appropriate evacuation assistance for persons with various impairments.
- Evacuation techniques for persons with various disabilities.

RTDC will also make available in accessible formats information on emergency procedures for passengers with disabilities.

Sharing information and coordinating with first responders about persons with disabilities is a critical part of an effective emergency response. Therefore RTDC will include objectives related to persons with disabilities in emergency simulations and exercises. To capture any lessons learned in this area, all After Actions Reviews will evaluate the handling of passengers with disabilities.



## Section 11 OPERATIONAL TESTS AND INSPECTIONS

## **11.1 OPERATIONAL TESTING**

All personnel with responsibilities under this plan including RTD Transit Security Officers will be periodically tested according to the requirements of the RTDC Operational Testing Plan (see Appendix J). The testing will be done in a manner compliant with the requirements of 49 CFR 239 and 49 CFR 217.

Operational tests on the requirements of part 239 will be accomplished through a combination of challenge questions and demonstrations of required skills and knowledge.

## **11.2 ELECTRONIC RECORDKEEPING**

The records of such Operational Testing will be maintained in the RTDC electronic Operational Testing System (OTS). Each record will contain the date, time, place, and result of each efficiency test that was performed and the name of the railroad officer who administered the test, the name of each employee tested, and sufficient information to identify the relevant facts relied on for evaluation purposes.

The OTS is fully compliant with the requirements of 49 CFR 239.303. Records will be maintained in the OTS for at least one calendar year after the end of the calendar year to which the test relates. Records may be reviewed or obtained by representatives of FRA by contacting the Senior Operating Rules Specialist or his designee during normal business hours.

The Deputy Chief Transportation Officer is responsible for completing the Six Month Review and Annual Summary as required in 239.301 (e) and (f). A record of each summary will be retained for three calendar years after the end of the calendar year to which the record relates and shall be made available to representatives of FRA and States participating under part 212 of this chapter for inspection and copying during normal business hours.



## Section 12 APPENDICES



## APPENDIX A: LIST OF CROSSINGS

Grade Crossing Inventory for East Corridor, Northwest Electrified Segment, and Gold Line

East Corridor	Latitude	Longitude	MAS	DOT #	MP	Type	Veh. Gates with Flashers	Ped. Gates	Ped. Flashers	2nd Train Warning	Lanes on Apprch. 1	Lanes on Apprch. 2	Loops	Advanced Preemption	CCTV
38th and Blake Station South	39°46'12.99431"	-104°58'27.24137"	40		1.86	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
38th and Blake Station North	39°46'15.72145"	-104°58'23.71355"	40		1.93	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
York St.	39°46'22.61778"	-104°57'33.97730"	79	804 622A	2.72	Highway	6	None	*	2	4	2	6	Yes	Yes
Josephine St.	39°46'22.61672"	-104°57'33.22185"	79	804 623G	2.73	Highway									
Clayton St.	39°46'31.65082"	-104°57'14.92642"	60	804 625 V	3.09	Highway	4	4	*	4	1	1	12	N/A	Yes
Steele St.	39°46'32.47232"	-104°56'59.28987"	60	804 626 C	3.32	Highway	4	4	*	4	1	1	12	N/A	Yes
Colorado Station South	39°46'33.54441"	-104°56'35.66979"	65		3.67	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Colorado Station North	39°46'33.80802"	-104°56'30.68764"	65		3.74	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Dahlia St.	39°46'33.55419"	-104°55'54.21456"	79	804 628 R	4.29	Highway	5	None	4	4	1	2	16	Yes	Yes
Holly St.	39°46'28.87432"	-104°55'20.29542"	79	804 631 Y	4.79	Highway	5	None	4	4	1	2	16	Yes	Yes
Monaco Pkwy.	39°46'23.94211"	-104°54'45.97007"	79	804 633 M	5.31	Highway	6	None	4	4	1	2	25	Yes	Yes
SB Quebec Pkwy.	39°46'19.32104"	-104°54'12.54590"	79	804 635 B	5.81	Highway	2	None	2	2	4	N/A	N/A	Yes	Yes
NB Quebec Pkwy.	39°46'18.75285"	-104°54'08.43727"	79	804 636 H	5.88	Highway	2	None	2	2	4	N/A	N/A	N/A	Yes
Ulster St.	39°46'14.88616"	-104°53'38.97377"	79	804 638 W	6.32	Highway	4	None	4	4	1	1	20	Yes	Yes
Central Park Blvd. Station South	39°46'14.36378"	-104°53'31.97721"	79		6.42	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Central Park Blvd. Station North	39°46'13.99268"	-104°53'27.00701"	79		6.49	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Havana St.	39°46'07.23427"	-104°51'56.64080"	79	804 606 R	7.84	Highway	6	None	*	4	2	3	27	Yes	Yes
Peoria Station South	39°46'03.28619"	-104°51'03.97341"	79		8.62	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Peoria Station North	39°46'02.91142"	-104°50'58.97818"	79		8.69	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Sable Blvd.	39°45'43.67729"	-104°49'09.60315"	79	906 043 Y	10.36	Highway	4	N/A	N/A	2	2	2	18	Yes	Yes
Chambers Rd.	39°45'34.73948"	-104°48'36.11328"	79	805 500 Y	10.89	Highway	8	None	*	4	3	3	37	Yes	Yes
40th and Airport Station North	39°46'13.49343"	104°47'15.68763"	79		12.78	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
40th and Airport Station South	39°46'9.65239"	104°47'15.63098"	79		12.86	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes

\* Indicates that pedestrian flashers are provided by vehicle flashers

Northwest Electrified Segment	Latitude	Longitude	MAS	DOT #	MP	Type	Veh. Gates with Flashers	Ped. Gates	Ped. Flashers	2nd Train Warning	Lanes on Apprch. 1	Lanes on Apprch. 2	Loops	Advanced Preemption	CCTV
BNSF Fuel Yard	39.766541°	-104.997032°	50		1.09	Highway	2	N/A	N/A	N/A	1	1	N/A	N/A	N/A
41st and Fox Station	39.772952°	-104.996937°	50		1.53	Pedestrian	N/A	None	4	4	N/A	N/A	N/A	N/A	Yes

Gold Line	Latitude	Longitude	MAS	DOT #	MP	Crossing Type	Veh. Gates with Flashers	Ped. Gates	Ped. Flashers	2nd Train Warning	Lanes on Apprch. 1	Lanes on Apprch. 2	Loops	Advanced Preemption	CCTV
West 60th Ave.	39.805437°	-105.013958°	30		4.47	Highway	3	N/A	N/A	N/A	1	1	N/A	N/A	N/A
Federal Blvd. Station	39.803913°	-105.022807°	55		5.00	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Lowell Blvd.	39.804583°	-105.034704°	79	253 281 K	5.62	Highway	4	None	*	4	1	1	20	N/A	N/A
Tennysen St.	39.804716°	-105.044043°	70	253 282 S	6.12	Highway	4	None	*	4	1	1	26	N/A	N/A
Sheridan Blvd. Station	39.803778°	-105.048742°	50		6.38	Pedestrian	N/A	None	2	4	N/A	N/A	N/A	N/A	Yes
Lamar St.	39.800407°	-105.067326°	79	244 769 C	7.40	Highway	4	2	*	2	1	2	12	Yes	Yes
Saulsbury St.	39.799848°	-105.075566°	79	094 493 Y	7.85	Highway	4	N/A	N/A	4	1	1	3	Yes	Yes
Vance St.	39.799283°	-105.079102°	30	244 765 A	8.04	Highway	4	None	*	4	1	1	6	Yes	Yes
Olde Wadsworth Blvd.	39.798596°	-105.081450°	35	244 764 T	8.17	Highway	4	4	*	4	1	1	6	Yes	Yes
Allison/Zephyr St.	39.797669°	-105.085530°	70	244 763 L	8.40	Highway	4	2	*	2	1	1	8	Yes	Yes
Balsam St.	39.797009°	-105.088471°	70	244 762 E	8.56	Highway	4	2	*	2	1	1	6	Yes	Yes
Carr St.	39.796514°	-105.090874°	45	244 761 X	8.69	Highway	4	None	*	4	1	1	8	Yes	Yes
Garrison St.	39.794142°	-105.100157°	70	244 760 R	9.22	Highway	4	4	*	4	1	1	10	Yes	Yes
Independence St.	39.793413°	-105.104917°	70	244 759 W	9.47	Highway	4	None	*	4	1	1	8	Yes	Yes
Arvada Ridge	39.792436°	-105.111805°	60		9.85	Pedestrian	N/A	None	2	N/A	N/A	N/A	N/A	N/A	N/A
Miller St.	39.791982°	-105.114335°	70	244 756 B	9.99	Highway	5	None	*	2	1	2	13	Yes	Yes
Parfet St.	39.790558°	-105.121115°	79	244 755 U	10.36	Highway	4	N/A	N/A	None	1	1	10	Yes	Yes
Robb St.	39.789584°	-105.125730°	79	244 754 M	10.62	Highway	4	N/A	N/A	None	1	1	10	Yes	Yes
Tabor St.	39.788525°	-105.130879°	60	244 753 F	10.90	Highway	4	None	*	4	1	2	16	Yes	Yes
Ward Rd. Station	39.788107°	-105.132631°	30		11.00	Pedestrian	N/A	None	4	4	N/A	N/A	N/A	N/A	Yes

\* Indicates that pedestrian flashers are provided by vehicle flashers



[illegible]

This is a detailed architectural floor plan of the first floor of a building. The plan shows a long, narrow layout with various rooms and corridors. Key features include:

- Entrance Area:** Located at the bottom left, featuring a "12 PAIR-UP SEAT" and a "SAFETY EQUIPMENT LOCKER & FIRE EXTINGUISHERS" area.
- Locker Rooms:** Multiple "ELECTRIC LOCKER" rooms are distributed along the left side.
- Luggage Storage:** Two "OVERSIZE LUGGAGE BACK" areas are located on the right side.
- Emergency Exit:** An "EMERGENCY LADDER STORAGE" area is located near the top left.
- Dimensions:** Numerous dimensions are provided throughout the plan, such as "312.60" x "134.00" for the main rectangular area and "267.60" x "7305.1" for the overall width.
- Room Numbers:** Various room numbers are visible, including "2 696", "556", "10.00", "46.00", "10.00", "12.00", "13.00", "15.00", "17.00", "19.00", "21.00", "23.00", "25.00", "27.00", "29.00", "31.00", "33.00", "35.00", "37.00", "39.00", "41.00", "43.00", "45.00", "47.00", "49.00", "51.00", "53.00", "55.00", "57.00", "59.00", "61.00", "63.00", "65.00", "67.00", "69.00", "71.00", "73.00", "75.00", "77.00", "79.00", "81.00", "83.00", "85.00", "87.00", "89.00", "91.00", "93.00", "95.00", "97.00", "99.00", "101.00", "103.00", "105.00", "107.00", "109.00", "111.00", "113.00", "115.00", "117.00", "119.00", "121.00", "123.00", "125.00", "127.00", "129.00", "131.00", "133.00", "135.00", "137.00", "139.00", "141.00", "143.00", "145.00", "147.00", "149.00", "151.00", "153.00", "155.00", "157.00", "159.00", "161.00", "163.00", "165.00", "167.00", "169.00", "171.00", "173.00", "175.00", "177.00", "179.00", "181.00", "183.00", "185.00", "187.00", "189.00", "191.00", "193.00", "195.00", "197.00", "199.00", "201.00", "203.00", "205.00", "207.00", "209.00", "211.00", "213.00", "215.00", "217.00", "219.00", "221.00", "223.00", "225.00", "227.00", "229.00", "231.00", "233.00", "235.00", "237.00", "239.00", "241.00", "243.00", "245.00", "247.00", "249.00", "251.00", "253.00", "255.00", "257.00", "259.00", "261.00", "263.00", "265.00", "267.00", "269.00", "271.00", "273.00", "275.00", "277.00", "279.00", "281.00", "283.00", "285.00", "287.00", "289.00", "291.00", "293.00", "295.00", "297.00", "299.00", "301.00", "303.00", "305.00", "307.00", "309.00", "311.00", "313.00", "315.00", "317.00", "319.00", "321.00", "323.00", "325.00", "327.00", "329.00", "331.00", "333.00", "335.00", "337.00", "339.00", "341.00", "343.00", "345.00", "347.00", "349.00", "351.00", "353.00", "355.00", "357.00", "359.00", "361.00", "363.00", "365.00", "367.00", "369.00", "371.00", "373.00", "375.00", "377.00", "379.00", "381.00", "383.00", "385.00", "387.00", "389.00", "391.00", "393.00", "395.00", "397.00", "399.00", "401.00", "403.00", "405.00", "407.00", "409.00", "411.00", "413.00", "415.00", "417.00", "419.00", "421.00", "423.00", "425.00", "427.00", "429.00", "431.00", "433.00", "435.00", "437.00", "439.00", "441.00", "443.00", "445.00", "447.00", "449.00", "451.00", "453.00", "455.00", "457.00", "459.00", "461.00", "463.00", "465.00", "467.00", "469.00", "471.00", "473.00", "475.00", "477.00", "479.00", "481.00", "483.00", "485.00", "487.00", "489.00", "491.00", "493.00", "495.00", "497.00", "499.00", "501.00", "503.00", "505.00", "507.00", "509.00", "511.00", "513.00", "515.00", "517.00", "519.00", "521.00", "523.00", "525.00", "527.00", "529.00", "531.00", "533.00", "535.00", "537.00", "539.00", "541.00", "543.00", "545.00", "547.00", "549.00", "551.00", "553.00", "555.00", "557.00", "559.00", "561.00", "563.00", "565.00", "567.00", "569.00", "571.00", "573.00", "575.00", "577.00", "579.00", "581.00", "583.00", "585.00", "587.00", "589.00", "591.00", "593.00", "595.00", "597.00", "599.00", "601.00", "603.00", "605.00", "607.00", "609.00", "611.00", "613.00", "615.00", "617.00", "619.00", "621.00", "623.00", "625.00", "627.00", "629.00", "631.00", "633.00", "635.00", "637.00", "639.00", "641.00", "643.00", "645.00", "647.00", "649.00", "651.00", "653.00", "655.00", "657.00", "659.00", "661.00", "663.00", "665.00", "667.00", "669.00", "671.00", "673.00", "675.00", "677.00", "679.00", "681.00", "683.00", "685.00", "687.00", "689.00", "691.00", "693.00", "695.00", "697.00", "699.00", "701.00", "703.00", "705.00", "707.00", "709.00", "711.00", "713.00", "715.00", "717.00", "719.00", "721.00", "723.00", "725.00", "727.00", "729.00", "731.00", "733.00", "735.00", "737.00", "739.00", "741.00", "743.00", "745.00", "747.00", "749.00", "751.00", "753.00", "755.00", "757.00", "759.00", "761.00", "763.00", "765.00", "767.00", "769.00", "771.00", "773.00", "775.00", "777.00", "779.00", "781.00", "783.00", "785.00", "787.00", "789.00", "791.00", "793.00", "795.00", "797.00", "799.00", "801.00", "803.00", "805.00", "807.00", "809.00", "811.00", "813.00", "815.00", "817.00", "819.00", "821.00", "823.00", "825.00", "827.00", "829.00", "831.00", "833.00", "835.00", "837.00", "839.00", "841.00", "843.00", "845.00", "847.00", "849.00", "851.00", "853.00", "855.00", "857.00", "859.00", "861.00", "863.00", "865.00", "867.00", "869.00", "871.00", "873.00", "875.00", "877.00", "879.00", "881.00", "883.00", "885.00", "887.00", "889.00", "891.00", "893.00", "895.00", "897.00", "899.00", "901.00", "903.00", "905.00", "907.00", "909.00", "911.00", "913.00", "915.00", "917.00", "919.00", "921.00", "923.00", "925.00", "927.00", "929.00", "931.00", "933.00", "935.00", "937.00", "939.00", "941.00", "943.00", "945.00", "947.00", "949.00", "951.00", "953

## **APPENDIX C: RTDC EMERGENCY PREPAREDNESS TRAINING FOR OPERATORS AND SUPERVISORS**

Course Title: RTDC Emergency Preparedness Training for Operators

Target Audience: Operators in passenger service and Transportation and Terminal Supervisors.

Class Size: Typical class size will be 10 to 15, not to exceed 20

Length: 8 hours initial, 4 hours refresher

Frequency: Initial training and refresher training at least once every two calendar years.

Instructional Methods: Interactive instructor led class discussion, lecture and practical demonstrations including hands on practice of key skills.

Testing: Participants must demonstrate successful completion of the course by passing a written examination with a score of at least 80%. Examinations will be of sufficient scope and difficulty to reliably evaluate the knowledge and skills of the participants. The test questions must be objective, multiple choice or fill-in-the-blank questions. Testing will also include skill demonstrations that will be evaluated on a pass/fail basis. Participants who fail individual tests will be given remedial instruction and a reasonable opportunity to retest.

### Course Outline:

- Overview of 49 CFR 239 requirements
- Overview of the RTDC Emergency Preparedness Plan including the RTDC emergency management structure and protocols for a passenger train emergency
- Equipment familiarization (supplements Operator Qualification Training):
  - Familiarization with emergency egress and emergency access
  - Use of on-board emergency equipment
  - Hands-on practice with emergency exit methods and on-board emergency tools
- Situational awareness:
  - Initial assessment of an emergency situation
  - Maintaining awareness as the situation evolves
- Passenger Evacuation:
  - Determining when an evacuation is necessary
  - Preparing for evacuation
  - Managing the evacuation of passengers in various situations in accordance with the RTDC Evacuation Guidelines
  - Assisting passengers with disabilities in an emergency including:
    - Directing first responders to persons with disabilities
    - How to communicate with hearing and visually impaired persons
    - Arranging appropriate evacuation assistance for persons with various impairments

- Evacuation techniques for persons with various disabilities
  - Familiarization with Special Circumstance locations and the procedures required at these locations
- Emergency communication:
  - Methods and protocols for communicating with the OCC
  - Methods and guidelines for communicating with passengers
  - Communicating with first responders during a passenger train emergency
- Coordination of functions:
  - Coordinating with or delegating to other on-board personnel and first responders.
  - Familiarization with the Incident Command System, how to function as the initial Incident Commander until relieved and how to function within an Incident Command structure.

## **APPENDIX D: RTDC EMERGENCY PREPAREDNESS TRAINING FOR ON-BOARD PERSONNEL**

Course Title: RTDC Emergency Preparedness Training for On-board Personnel

Target Audience: Transit Security Officers and other personnel who may be assigned on board duties

Class Size: Typical class size will be 10 to 15, not to exceed 20

Length: 8 hours initial, 4 hours refresher

Frequency: Initial training and refresher training at least once every two calendar years.

Instructional Methods: Interactive instructor led class discussion, lecture and practical demonstrations including hands on practice of key skills.

Testing: Participants must demonstrate successful completion of the course by passing a written examination with a score of at least 80%. Examinations will be of sufficient scope and difficulty to reliably evaluate the knowledge and skills of the participants. The test questions must be objective, multiple choice or fill-in-the-blank questions. Testing will also include skill demonstrations that will be evaluated on a pass/fail basis. Participants who fail individual tests will be given remedial instruction and a reasonable opportunity to retest.

Course Outline:

- Overview of the Federal requirements at 49 CFR 239
- Overview of the RTDC Emergency Preparedness Plan including the RTDC emergency management structure and protocols for a passenger train emergency
- Basic railroad safety on and about tracks and rolling stock
- Overhead Catenary System safety
- Equipment familiarization:
  - Methods of emergency egress including emergency operation of doors
  - Use of on-board emergency equipment
  - Use of on-board communication systems (radio and PA)
  - Hands-on practice with emergency exit methods, on-board communication systems and emergency tools
- Situational awareness:
  - Initial assessment of an emergency and maintaining awareness as the situation evolves
  - Managing the evacuation of passengers in various situations in accordance with the RTDC Evacuation Guidelines
  - Assisting passengers with disabilities in an emergency including:
    - Directing first responders to persons with disabilities
    - How to communicate with hearing and visually impaired persons
    - Arranging appropriate evacuation assistance for persons with various impairments

- Evacuation techniques for persons with various disabilities
- Emergency communication:
  - Methods and protocols, including Radio rules contained in the RTDC Operating Rules, for communicating with the OCC, passengers and first responders during a passenger train emergency
- Coordination of functions:
  - Interacting with other on-board personnel and first responders
  - Familiarization with the Incident Command System and functioning within an Incident Command structure
- Flagging
  - Rules and procedures for providing flag protection including at grade crossings and on the tracks of parallel operations if necessary.

## **APPENDIX E: RTDC Emergency Preparedness Training for Dispatchers**

Course Title: RTDC Emergency Preparedness Training for Dispatchers

Target Audience: Dispatchers, Operations Control Supervisors and Assistants

Class size: Typical class size will be 5 to 10, not to exceed 15

Length: 8 hours initial, 4 hours refresher

Frequency: Initial training and refresher training at least once every two calendar years.

Instructional Methods: Interactive instructor led class discussion and lecture. Territory familiarization will be accomplished by a combination of train or high rail rides and site visits supported by study of physical characteristics maps and reference material.

Testing: Participants must demonstrate successful completion of the course by passing a written examination with a score of at least 80%. Examinations will be of sufficient scope and difficulty to reliably evaluate the knowledge and skills of the participants. The test questions must be objective, multiple choice or fill-in-the-blank questions. Testing will also include skill demonstrations that will be evaluated on a pass/fail basis. Participants who fail individual tests will be given remedial instruction and a reasonable opportunity to retest.

### **Course Outline:**

- Overview of the Federal requirements at 49 CFR 239
- Overview of the RTDC Emergency Preparedness Plan including the RTDC emergency management structure and protocols for a passenger train emergency
- RTDC Emergency Preparedness Procedures:
  - Training on the RTDC OCC Standard Operating Procedures – Guidance for Dispatchers for Handling Passenger Train Emergencies (Appendix K)
  - Familiarization with the Federal requirements governing response to passenger train emergencies with emphasis on the responsibilities of OCC personnel
- Territory Familiarization:
  - Supplemental training on the characteristics of assigned dispatch territories with a particular emphasis on emergency response related characteristics including:
    - Special Circumstance locations (see Section 6)
    - Wayside access for responders
    - Parallel (adjacent) operations that may affect or be affected by the emergency response
    - Other operating conditions (e.g., elevated structures, bridges, and electrified territory) including areas along the right-of-way that are remote and that may present challenges for individuals responding to a passenger train emergency);

- Situational Assessment:
  - Procedures for evaluating the nature, scope and severity of passenger train emergencies including the use of the capability to remotely view on-board CCTV
  - Maintaining awareness as the situation evolves including information needed to aid emergency personnel
- Internal Communication:
  - Procedures for communicating with other OCC personnel to coordinate functions for an effective response to a passenger train emergency
  - Use of the ability to communicate with passengers using the PEI and the on-board PA system
- External Communication:
  - Procedures for establishing and maintaining external communications between the OCC and emergency responders and adjacent modes of transportation
  - Procedures to retrieve and communicate information to aid emergency personnel in responding to an emergency situation
- Notifications:
  - Protocols for making proper notification to emergency response agencies, RTD and RTDC personnel, adjacent affected transportation modes and regulatory agencies in the event of a passenger train emergency



## **APPENDIX F: RTDC PASSENGER TRAIN EMERGENCY TRAINING FOR FIRST RESPONDERS**

Course Title: RTDC Emergency Preparedness Training for First Responders

Target Audience: First Responders from Emergency Response Agencies in the RTDC service area

Class size: Typical class size will be 10 to 15, not to exceed 20

Length: 4 hours

Frequency: As requested by the Agencies

Instructional Methods: Instructor led with class discussion, lecture and practical demonstrations including hands on practice of key skills.

Testing: Testing will be done at the discretion of the participating agencies.

Course Outline:

- Overview of the Federal requirements at 49 CFR 239
- Overview of the RTDC Emergency Preparedness Plan:
  - Overview of RTDC emergency management structure
  - Protocols for a passenger train emergency
  - Contact person for RTDC emergency response questions or concerns
- Equipment familiarization:
  - Familiarization with the traction power system and potentially energized components on the car
  - Familiarization with emergency egress and emergency access methods
  - Hands-on practice with emergency access and egress methods
- Safety on the right-of-way:
  - Protocols for requesting authorization to enter the track area or foul tracks
  - Protocols for requesting power to be de-energized
  - Review of Special Circumstance locations in the response territory
- Familiarization with the RTDC Evacuation Guidelines



# APPENDIX G: On-board Emergency Instructions

**EMERGENCY INSTRUCTIONS**

**IN THE EVENT OF AN EMERGENCY**

- STAY IN PLACE
- LISTEN FOR INSTRUCTIONS
- DO NOT** EXIT THE TRAIN UNLESS DIRECTED BY EMERGENCY PERSONNEL

**IF EVACUATION IS REQUIRED**

- STAY CALM
- FOLLOW DIRECTIONS OF EMERGENCY PERSONNEL
- EVACUATE IN AN ORDERLY MANNER
- BE ALERT FOR HIGH VOLTAGE WIRES, DISTANCE TO GROUND, AND OTHER TRAINS
- MOVE AWAY FROM ACTIVE TRACK AREA

**EMERGENCY EXIT LOCATIONS ON THIS CAR**

**EMERGENCY EQUIPMENT**

FIRE EXTINGUISHER

EMERGENCY TOOLS

EMERGENCY LADDER

**EMERGENCY EXITS**

END CAR DOOR EXIT TO NEXT CAR

EMERGENCY SIDE DOOR EXITS (BOTH SIDES OF CAR)

EMERGENCY WINDOW EXITS

**EMERGENCY EXIT OPTIONS**

- USE END CAR DOOR TO ACCESS OTHER CAR
- USE SIDE DOOR. BE CAREFUL IF EXITING TO TRACK AREA
- USE EMERGENCY WINDOW EXIT IF DOORS ARE BLOCKED. FOLLOW INSTRUCTIONS ON WINDOW TO REMOVE

## Emergency Door Operation Instructions

Graphic shown is for illustration purposes only. Actual graphic is being designed.



## APPENDIX H: RTDC PASSENGER TRAIN EVACUATION GUIDELINES

### 1. General Guidelines

- 1.1. This document provides guidance for managing situations where passengers must be moved from a car or train in circumstances other than a normal discharge at a station. Passengers may need to be evacuated from a car or train for many reasons such as a disabled train, a prolonged service disruption or an immediate threat to passenger safety. Since each situation is unique these guidelines must be applied with sound judgment in light of the specific circumstances of each event.

Evacuations present their own risks and can have adverse impacts on passengers, responders and the operation. Therefore, evacuating passengers from a train will be done only when there is not a feasible alternative such as moving the train to a station where passengers may de-board in the usual manner. Unless circumstances make it an absolute necessity, no evacuation should be initiated without notification to and approval from the OCC. Whenever possible, evacuations should not be initiated until first responders are on the scene. In any case, when deciding whether to evacuate, how to evacuate and while conducting an evacuation operation, the first priority must always be passenger safety followed by passenger convenience and comfort.

### 1.2. Communication with Customers

As soon as practical, timely and accurate information must be provided to customers. Clear and frequent communication with customers can help reduce passenger distress and the likelihood of panic. It can also help ensure their cooperation and compliance with instructions. The Operator has the primary responsibility to make announcements to customers; however, other on-board personnel, supervisory employees or OCC personnel must ensure that announcements are made in the event the operator cannot do so.

Customers should be informed of:

- the nature of the situation;
- the preparations customers should make if an evacuation is anticipated;
- any immediate actions required by customers such as evacuating one or more cars;
- actions being taken by the railroad to respond to the emergency;
- if known, the expected duration of the situation or the amount of time until emergency responders arrive at the scene.

### 1.3. Uncontrolled Evacuation

In the event of an uncontrolled evacuation (e.g. passengers self-evacuate) the Operator must immediately make an emergency radio broadcast directing all trains approaching the evacuation site to come to a stop. The OCC must then be advised of the situation. The OCC must immediately take the necessary steps to ensure that the area of the evacuation is properly protected.

As soon as trains in the area are stopped and the OCC has been notified, the Operator and any other available RTDC personnel must assess the situation and take the most appropriate actions to organize and direct the self-evacuation so that it proceeds as safely as possible or, if warranted, request that passengers remain on-board the train and wait for further instructions and emergency assistance.

#### 1.4. Order of Preference for Evacuation Methods

When an evacuation is necessary, the method of evacuation should be chosen based on the nature of the emergency, the urgency of the situation and the prevailing operational circumstances. When circumstances permit, the order of preference for evacuation methods is:

1. Train to platform – move the train to a station and discharge passengers to a station platform.
2. Same consist – move passengers from the affected car to an unaffected car in the same consist.
3. Train to train – move passengers through the end door to a rescue train on the same track.
4. Train to roadbed - discharge passengers to the roadbed.
5. Train to train –move passengers across transfer boards to a rescue train on an adjacent track.

### 2. Evacuation Methods

#### 2.1. Train to platform

##### 2.1.1. Fully Platformed Train

If not already at a station, whenever possible the Operator must be directed to move the train to the nearest station. Prior to discharging the passengers onto the station platform, announcements must be made informing passengers of the reason for the evacuation and what actions they should take after leaving the train (e.g. remain on the platform or leave the station area). Special attention must be paid to ensure that any passengers with disabilities are assisted to safety. The Operator or other railroad or emergency personnel must confirm that all passengers have left the train before concluding the evacuation.

##### 2.1.2. Partially Platformed Train

If a train does not have all doors fully on the platform, the Operator or other railroad personnel must proceed through the cars, opening only those doors that are on the platform. Prior to discharging the passengers onto the station platform announcements must be made informing passengers of the reason for the evacuation, the locations of the open doors and what actions they should take after leaving the train (e.g. remain on the platform or leave the station area). If possible, the interior car doors must be secured or held open to expedite passenger movement. Special attention must be paid to ensure that any passengers with disabilities are assisted to safety or that an appropriate alternate means of evacuation is provided. The Operator or other railroad or emergency personnel must confirm that all passengers have left the train before concluding the evacuation.

### 2.1.3. Bridge Train to Platform

When a second train is at a platform on the same track as the train to be evacuated, the trains may be coupled so that passengers can move to the second train to reach the station platform. Announcements must be made informing passengers that it is necessary to evacuate, the reason for the evacuation and providing any instructions they need to effect the evacuation. They must also be informed of the actions they should take after leaving the train (e.g. remain on the platform or leave the station area). Special attention must be paid to ensure that any passengers with disabilities are assisted to safety or that an appropriate alternate means of evacuation is provided. The Operator or other railroad or emergency personnel must confirm that all passengers have left the train before concluding the evacuation.

## 2.2. Same Consist: Affected car to an unaffected car.

### 2.2.1. Move passengers from the affected car to an unaffected car in the same consist.

When the problem is isolated to a single car of the train passengers may be moved from that car to a position of safety in another car in the same consist. Before beginning any car to car transfer, the train must be stopped and three-point protection applied. Announcements must be made informing passengers of the need to leave the affected car and directing them to move in an orderly fashion to the other car. If possible, the appropriate car body doors must be secured or held open to expedite passenger movement. Special attention must be paid to ensure that any passengers with disabilities are assisted to safety or that an appropriate alternate means of evacuation is provided. When the affected car has been evacuated it should be secured to prevent passengers from re-entering. Upon completion of the car to car transfer, the Operator must contact the OCC for additional instructions before moving the train.

## 2.3. Train to Train – Same Track

### 2.3.1. Rescue Train on the Same Track

The OCC will coordinate and direct the rescue train that will be used to evacuate passengers. Whenever possible, the rescue train should be coupled to the train being evacuated. Prior to making a decision to couple rescue trains to a stranded unit an on-site evaluation must be made to ensure there is no potential to transfer faults between the rescue and stranded units. Announcements must be made informing passengers that it is necessary to evacuate, the reason for the evacuation and providing any instructions they need to effect the evacuation. They must also be informed of the actions they should take after leaving the train (e.g. moving to the rescue train). Special attention must be paid to ensure that any passengers with disabilities are assisted to safety. The Operator or other railroad or emergency personnel must confirm that all passengers have left the train before concluding the evacuation.

If it is not possible to couple the two trains, passengers should be evacuated onto the roadbed and then proceed onto the rescue train. The Operator or other railroad or emergency personnel must follow the prescribed method to ensure that the emergency ladders are properly installed and safe for use. If passengers will be on the roadbed then all of the requirements in Section 2.4 apply. Passengers must not be permitted to pass between trains that are not coupled unless a Safety Briefing has been held involving the Operators of both trains and field supervision to ensure that both trains have been properly secured

against movement and that passengers will be able to cross safely from train to train. Before concluding the operation and allowing the movement of trains the Operator, other railroad personnel or emergency responders must confirm that all passengers have safely boarded the rescue train or are otherwise accounted for.

## 2.4. Train to Roadbed

### 2.4.1. Special Requirements for Evacuations to the right-of-way

2.4.1.1. Do not evacuate passengers onto the roadbed unless no other means of evacuation is possible.

The OCC must approve and coordinate all evacuations to the roadbed. Approval should only be given when it is impractical or unsafe to mitigate the situation by other means such as moving the train to a station platform or making a train to train transfer.

2.4.1.2. Whenever possible, a railroad official accompanied by emergency responders must be on the scene before any evacuation to the roadbed begins. However, if urgent circumstances necessitate it, the OCC or the railroad supervisor in charge may direct the evacuation to begin before emergency responders arrive.

2.4.1.3. Before beginning an evacuation that requires passengers to walk along the roadbed or to cross tracks, the Dispatcher must confirm that all trains on adjacent tracks are stopped and will remain stopped until the evacuation is completed.

2.4.1.4. Before beginning the evacuation, the Operator must place the brakes in emergency application, place the controller in the off position and apply the parking brake. This protection must remain in place until the evacuation is completed.

2.4.1.5. When there is any potential hazard from the catenary system such as catenary wires downed at or in close proximity to the evacuation site, catenary power must be removed and must remain so until the hazard has been mitigated or the evacuation is completed.

2.4.1.6. Special attention must be paid to ensure that any passengers with disabilities are assisted to safety or that an appropriate alternate means of evacuation is provided.

### 2.4.2. General Procedure for Evacuations to the Roadbed

The Operator or other railroad or emergency personnel on the scene will direct the evacuation as follows:

1. The Operator or the OCC should inform passengers to prepare for an evacuation to the roadbed.
2. The Operator must confirm with the OCC that rail traffic is stopped and that the evacuation can proceed.
3. The Operator or other railroad or emergency personnel must determine the evacuation route, the assembly area for evacuees and the door(s) to be used for exit to the roadbed.



4. If necessary request assistance from passengers to assist the crew in directing and aiding other passengers.
  5. Follow the prescribed method to erect the emergency ladder at the designated exit(s).
  6. Station personnel at the door(s) to be used for the evacuation, preferably one at the door and one on the roadbed.
  7. Direct passengers to proceed through the train to the designated exit(s).
  8. Railroad personnel must direct emergency responders to any known disabled passengers who may require assistance to evacuate.
  9. Designate railroad or other emergency personnel to lead passengers along the roadbed. If passengers cannot immediately leave the track area they should be directed to walk in the gage of the track, preferably the occupied track, to a designated assembly area or a location where they can safely leave the track area.
  10. The Operator or other railroad or emergency personnel must confirm that all passengers have left the train and that all evacuees and other personnel are safely clear of the track area before concluding the evacuation. When affected train has been evacuated it must be secured to prevent passengers from re-entering.
- 2.5. Train to Train – Adjacent Track

#### 2.5.1. Rescue Train on an Adjacent Track

The Operator or other on scene RTDC personnel must confer with the OCC to determine if the inter-track distance and relative elevations of the adjacent tracks will permit the use of transfer boards between trains. When the operating conditions and physical characteristics of the incident location permit, the OCC will coordinate and direct a rescue train to a point adjacent to the affected train. The rescue train must be positioned at the point that allows the safest and most direct route between the trains.

Before setting up transfer boards or any other apparatus between the trains, all pantographs on both trains must be lowered to protect against any shock hazard. Pantographs may not be raised until the transfer is complete and all persons and objects connecting the two trains are removed. The Operator and other railroad and emergency personnel must follow the prescribed method to ensure that transfer boards are properly secured between the two consists.

Announcements must be made informing passengers that it is necessary to evacuate, the reason for the evacuation and providing any instructions they need to effect the evacuation. The Operator and other railroad and emergency personnel must direct and assist passengers in moving across the transfer boards to the rescue train. Special attention must be paid to ensure that any passengers with disabilities are assisted to safety or that an appropriate alternate means of evacuation is provided. The Operator or other railroad or emergency personnel must confirm that all passengers have left the train and are safely on-board the rescue train before concluding the evacuation. When the affected train has been evacuated it must be secured to prevent passengers from re-entering.

#### 2.5.2. Evacuations at Special Circumstance Locations



Special Circumstance Locations are identified in this document and in the RTDC Timetable Special Instructions. Evacuating a train at a Special Circumstance Location should be avoided whenever possible. If the affected train is located in a designated Special Circumstance Location, the Operator must so inform the Dispatcher. When circumstances permit, every effort must be made to move the affected train clear of the Special Circumstance location prior to initiating any evacuation. At designated Special Circumstance Locations, railroad personnel must follow the evacuation procedures identified for that location. This includes the use of designated egress paths from the right-of-way and the use of designated areas of assembly.

# APPENDIX I: AFTER ACTION REPORT FORMS

## Report of After Action Review

REVIEW	Event Name ( <i>MM_DD_YY_short title</i> )		Review Date	Review Location
	Prepared by: (name, title, phone)			Attendees – See Sign In Sheet(s)
EVENT	Event Date and Time		Event Location - MP, Station/Crossing, Line, County, Municipality	
	Brief Event Description (attach additional sheets if necessary.)			
	Casualties (Summarize by type of person and reportable fatal, reportable non-fatal and recordable.)			
NOTIFICATION, COMMUNICATION and RESPONSE	1. Initial notification (Assess the means, timeliness and accuracy of initial notification to the OCC.)			
	2. Notification and communication - OCC with Emergency Response Agencies (describe the effectiveness of initial and on-going communication including the elapsed time from occurrence to responder notification.)			
	3. Notification and communication - OCC with internal and external individuals and agencies (were individuals and agencies notified and kept apprised per established protocols.)			
	4. Announcements and communication with passengers (Describe the methods used and the effectiveness of initial and on-going communication with passengers.)			
	5. Performance of on-board communication equipment (What on-board communication equipment was used and did it perform as intended?)			
	6. Other (Describe any other factors that had a significant impact on the response to the event.)			
	7. Response Times for Emergency Responders and Other Resources (List, including elapsed time from notification to arrival.)			



EVACUATION	8. Passenger Train Evacuation (Describe the cause, location, means and overall effectiveness of the evacuation process including a timeline from the decision to evacuate to the start and conclusion of the evacuation. Include any special challenges such as Special Circumstance locations, passengers with disabilities, weather conditions, unusual hazards, etc.)	
ICS	9. Incident Command (Indicate lead agency, incident commander(s), command post location and participating agencies. Assess the effectiveness of the Incident Command System as implemented in this event.)	
ACTION ITEMS	List the applicable equipment, training, policies, plans, and procedures that were particularly effective (Strengths) and any that should be reviewed, revised, or developed (Action Items). Indicate the priority level ( <u>H</u> igh, <u>M</u> edium, and <u>L</u> ow) for Action Items. A formal Corrective Action Plan (CAP) must be developed to address Medium and High priority actions.	
	<b>Strengths and Action Items</b> <b>Priority</b>	
	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
APPROVAL	Name (print)	Title
	Signature	Date



**Event Name** \_\_\_\_\_ **Review Date** \_\_\_\_\_

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## **APPENDIX J: RTDC OPERATIONAL TESTING PLAN EXCERPT FOR PART 239 TESTS**

### **Emergency Preparedness Testing**

**Test Type:** Emergency

**Rules:** TBD

### **Description of Test**

Regional Transportation District Commuter Railroad is required by Federal Regulation (49 CFR 239.301) to conduct operational tests of on-board and Operations Control Center (OCC) employees, including RTD Transit Security Officers assigned as second crew members, to determine the extent of compliance with the Emergency Instructions. This test will document if those employees know how to respond in the event of an emergency.

This test checks for compliance with responsibilities regarding passenger safety announcements, emergency equipment, on-board emergency communications, and emergency communications with or by the Operations Control Center and passenger evacuation procedures.

### **Conditions for Test**

Emergency preparedness tests will almost always be by direct observation and may be conducted while an employee is required to actually perform any Emergency Instruction or they may be conducted as part of a full-scale or table top passenger train emergency simulation. They may also be conducted as part of a question and answer session with a Testing Officer.

### **Testing Guidelines**

There are nine areas in the Emergency Instructions that can be tested:

1. Communication
  - a. Initial Communication
  - b. Customer Communication
  - c. On-going Communication
2. OCC Notifications
3. RTDC Emergency Procedures
4. Train Evacuation Procedures
5. Roles and Responsibilities
6. On-board Emergency Equipment
7. Emergency Ingress and Egress
8. Special Circumstance Locations
9. Passengers with Disabilities

**Additional Rules Tested**

Compliance with the following additional rules should be observed during this test:

1. Proper telephone and radio procedures are followed.

**Failure Defined**

The test is a failure if:

1. Any failure to comply with any rule or instruction specific to emergency preparedness.
2. The employee fails to demonstrate knowledge of required rules, procedures, or information related to emergency instructions.



**APPENDIX K: EMERGENCY PREPAREDNESS PLAN RELATED PROCEDURES**

<b>Procedure Type</b>	<b>Procedure Name / Description</b>	<b>Procedure Status</b>
RTDC Standard Operating Procedure	RTDC-ER-ENP-01 - Emergency Notification Procedure for the OCC: This procedure describes the responsibilities of all OCC personnel in notifying RTDC, RTD and public agencies in the event of certain emergencies.	See attachment
RTDC Standard Operating Procedure	RTDC-ER-OCS-01 Emergency Request to De-energize Overhead Catenary System: This procedure explains how first responders or RTDC personnel can get the Overhead Catenary System (OCS) de-energized in emergency situations.	See attachment
RTDC Standard Operating Procedure	Guidance for Dispatchers for Handling Passenger Train Emergencies	To be provided at a later date.
RTDC and Amtrak Emergency Procedures for Denver Union Station	Emergency Procedures applicable during Revenue Service	To be provided at a later date.

**Incidents, Accidents and Emergency Notification Procedure - OCC****I. PURPOSE**

This procedure describes the responsibilities of all OCC personnel in notifying RTDC/DTO, DTP, RTD and public agencies in the event of certain incidents, accidents and emergency events on RTDC system.

**II. RESPONSIBILITIES**

**OCC Train Dispatchers (OCC-TD)** – general responsibilities include:

- Receiving initial notification of the of incidents, accidents or emergency events on or near the RTDC system
- Gathering as much information as possible concerning the nature and extent of the situation
- Notifying Emergency Responders on METRONET (Call 911 if no response on METRONET)
- Notifying Train Operator of the of incidents, accidents or emergency events, for further communication with Passengers on board through the Train PA/VMS
- Notifying SCC of the of incidents, accidents or emergency events
- Notifying the OCC Supervisors. If there is no OCC Supervisors on duty, OCC Train Dispatchers is responsible to make the ReadyOp notification, the Platform PA/VMS notification and the Phone Calls to RTD LROCC & BOCC, DIA, and FRA, as required.
- Notifying other trains delayed or otherwise effected by the incidents, accidents or emergency event as to the nature of the situation, expected delays, and any operational changes.
- Providing track protection as required if there is an impact on the RTDC system
- De-energizing the OCS as required if there is an impact on the RTDC system
- Consulting with RTDC management and determining the actions to be taken to best facilitate and accommodate the needs of the first responders at the scene of the emergency
- Getting constant update information from employees on the scene of the of incidents, accidents or emergency and relaying the information to OCC Supervisors and other RTDC officials
- Properly completing an Incident Report with the notifications on the event in the TMDS

**OCC Supervisors (OCC-S)** – general responsibilities include:

- Receiving notification of the of incidents, accidents or emergency event from the OCC Train Dispatchers on or near the RTDC system
- Notifying Passengers at Stations Platforms through the PA/VMS
- Notifying all appropriate internal and external parties included on the Ready Op System
- Notifying Passengers through the Rider Alerts System, as required
- Notifying DTP, RTD LROCC & BOCC and DIA, as required
- Notifying governmental regulatory and oversight agencies (FRA), as required
- Notifying RTD Bus Operations Control Center for Bus Bridge as required
- Sending out updates on the ReadyOp, PA/VMS, and Rider Alerts until the completion of the event.
- To the extent possible, maintain railroad operations in areas not effected by the event
- Receive calls if internal and external parties need additional information

**Incidents, Accidents and Emergency Notification Procedure - OCC**

**OCC Operations Support (OCC-OS)** – general responsibilities include:

- Receiving notification of the of incidents, accidents or emergency event from the OCC Train Dispatchers on or near the RTDC system
- Generate an Incident and/or Service Request Report in TMDS
- Notify the OCC Supervisors. If there is no OCC Supervisors on duty, OCC Operations Support is responsible to make the Rider Alerts, as required.
- Notifying RTDC Maintenance of Way and other Railroads, as required

**OCC Manager (OCC-M)** – or his/her designee shall be responsible for ensuring compliance with all of the requirements of these procedures.

### **III. DEFINITIONS, ACRONYMS AND ABBREVIATIONS**

**BNSF** – BNSF Railways

**BOCC** – Bus Operations Control Center

**DIA** – Denver International Airport

**DTO** – Denver Transit Operators

**DTP** – Denver Transit Partners

**FRA** – Federal Railroad Administration

**LROCC** – Light Rail Operations Control Center

**METRONET** – First Responders Notification System

**NTSB** – National Transportation Safety Board

**OCC** – Operations Control Center

**OCS** – Overhead Catenary System

**PA/VMS** – Public Announcement / Variable Message System

**ReadyOp** – RTDC Emergency Notification System

**Rider Alerts System** – RTDC Notification System to Passengers

**ROC** – Railroad Operations Commander – Under the railroad's emergency management plan the Railroad Operations Commander is the railroad person in charge of railroad operations at an incident scene. The ROC may or may not be the ranking railroad officer on scene; nevertheless all railroad functions will coordinate their actions through the ROC. The ROC acts as the railroad's liaison to the Incident Command Post.

**RTD** – Regional Transportation District

**RTDC** – Regional Transportation District Commuter Railroad

**SCC** – Security Command Center

**SOP** – Standard Operating Procedure

**TMDS** – Train Management Dispatch System

**UP** – Union Pacific

### **IV. SAFETY GUIDELINES**

No special safety guidelines are needed to perform this SOP.

### **V. SPECIAL TOOLS AND EQUIPMENT**

No special tools and equipment are needed to perform this SOP.

# **Incidents, Accidents and Emergency Notification Procedure - OCC**

## **VI. PROCEDURE**

### **A. Overview**

OCC personnel are responsible for the reporting of certain types of incidents, accidents and emergency events (see Appendix 1) on the RTDC system to internal and external parties within the time limits outlined in this SOP (see Appendix 2, 3 & 4).

### **B. Notification of Incidents, Accidents and Emergencies:**

1. Upon receiving a report of an accident, incident or emergency event on or near the RTDC system, or a delay in service exceeding five minutes, the **OCC Train Dispatcher must:**
  - a. Make every effort to collect as much information as possible, including:
    - i. The circumstances of the event including nature and extent of the of incidents, accidents and/ or emergency event, numbers of the train(s) involved and the number and extent of injuries,
    - ii. The location (line, track(s), milepost, nearest station or landmark, train number(s), track number of the train(s) involved,
    - iii. Any conditions affecting the movement of trains, (e.g., structures damaged, tracks fouled, fire, hazardous materials release, etc.),
    - iv. Any unusual circumstances that may pose an imminent danger or that may be useful for first responders,
    - v. The name and title of the person making the report,
    - vi. A telephone number of where this person may be reached.
  - b. If a report of an accident, incident or emergency event comes from another railroad that impacts the RTDC system,
    - i. Get as much information as possible.
    - ii. If necessary, make an emergency radio broadcast advising all trains approaching the incident location to bring their trains to a safe stop, hold position and await further instructions
    - iii. Immediately place all signals leading to the affected track(s) in Stop position, apply blocking devices to the controls of all switches and signals to protect the area.
    - iv. If required, de-energize power in the affected area. Prohibit access to the wayside until the OCS is confirmed grounded and tested dead in the field by a Traction Power Electrician.
  - c. Notify as soon as possible Emergency Responders on METRONET (Call 911 if no response on METRONET) and phone call RTD SCC, as required
  - d. Alert as soon as possible Train Operators and Transportation Supervisors to make on board Train public address announcements PA/VMS every three minutes in reference to the delays in service and any service changes.
  - e. If communications to the train(s) fail due to a system failure or the train operator being incapacitated, the OCC Train Dispatcher must use the Train PA/VMS feature at OCC to communicate emergency and non-emergency instructions to passengers on the train.
  - f. Alert as soon as possible the OCC Supervisor providing all pertinent information (detailed and accurate) on the event. When there is no OCC Supervisors on duty, OCC Train Dispatchers is responsible to make the ReadyOp notification, the Platform PA/VMS notification and the Phone Calls to RTD LROCC & BOCC, DIA, and FRA, as required.



## Incidents, Accidents and Emergency Notification Procedure - OCC

- g. Alert as soon as possible the OCC Operations Supports to notify and coordinate the response of RTDC Maintenance of Way and other Railroads as required
  - h. Provide constant updates to the OCC Supervisor until the completion of the event.
  - i. Initiate an incident report on the TMDS system from the start to the completion of the event providing all pertinent information (detailed and accurate) including the notifications that were sent out using the ReadyOp system.
  - j. Provide updates as necessary through the completion of the event and the return to normal service.
2. Upon receiving a report of an accident, incident or emergency event on or near the RTDC system, **the OCC Supervisor must:**
- a. Receive all pertinent information on the event from the OCC Train Dispatcher
  - b. Confer with the OCC Train Dispatcher on the status of the event and providing guidance and support as needed.
  - c. Notify as soon as possible potential Passengers by making station delay announcements through the PA/VMS, and by activating Rider Alerts. Periodic PA/VMS and Rider Alerts updates are required.
  - d. Notify the appropriate management personnel and external parties on the OCC Incident, Accident and Emergency Notification Contact List (Appendix 2) within the timeframe shown on the OCC Emergency Notification Time Limits Table (Appendix 3) and the OCC Incident, Accident and Emergency Notification Time Limits Flow Chart (Appendix 4):
    - i. DTO/DTP/RTD management personnel – Using ReadyOp System, the OCC Supervisor input all pertinent information such as location, train number, direction, injuries/fatalities, damage to infrastructure and equipment and service impact based on the type of event in the ReadyOp Event Group List.
    - ii. RTD LROCC & BOCC and DIA – Phone call in the event of a delays greater than ten minutes and/or service disruptions that require a bus bridge. Activate Bus Bridges on delays over twenty minutes.
    - iii. FRA – Phone call as soon as possible and no longer than 1 hour in the event of FRA reportable emergencies (see Appendix 3). If the emergency event is in a remote area, time-limits for FRA notifications start when the first employee that was not originally at the site of the emergency arrives at the site.
  - e. During emergencies –
    - i. Facilitate the actions necessary to support emergency responders and RTDC on scene staff. (For example, arranging for relief crews, additional on scene resources, rescue trains, etc.)
    - ii. Ensure that a ROC has been designated and that RTDC is represented at the incident command post in an emergency
    - iii. Coordinate with the ROC to ensure that estimates of equipment and infrastructure damage are provided for FRA reporting purposes.
    - iv. Follow-up with the ROC to update the estimated time to complete a preliminary field investigation, clear the railroad and return track(s) to service.
  - f. With the OCC Train Dispatcher and other RTDC officials, developing and implementing a plan for service recovery if needed.
  - g. Provide updates (ReadyOp, Phone Calls) to internal and external parties as necessary through the completion of the event and the return to normal service.

**Incidents, Accidents and Emergency Notification Procedure - OCC**

3. Upon receiving a report of an accident, incident or emergency event on or near the RTDC system, **the OCC Operations Supports must:**
  - a. Receive all pertinent information on the event from the OCC Train Dispatcher
  - b. Confer with the OCC Train Dispatcher on the status of the event and providing guidance and support as needed.
  - c. If the accident, incident or emergency has an impact on another railroad, the OCC Operations Supports must notify the impacted railroad (AMTRAK, BNSF or UP) immediately giving as much information as possible. The information should include:
    - i. The circumstances of the event including nature and extent of the of incidents, accidents and/ or emergency event, numbers of the train(s) involved and the number and extent of injuries,
    - ii. The location (line, track(s), milepost, nearest station or landmark, train number(s), track number of the train(s) involved,
    - iii. Any conditions affecting the movement of trains, (e.g., structures damaged, tracks fouled, fire, hazardous materials release, etc.),
    - iv. Any unusual circumstances that may pose an imminent danger or that may be useful for first responders,
    - v. The name and title of the person making the report,
    - vi. A telephone number of where this person may be reached.
  - d. Notify the OCC Supervisors. If there is no OCC Supervisors on duty, OCC Operations Support is responsible to make the Rider Alerts, as required.
  - e. Coordinate the accident, incident or emergency response with RTDC Maintenance of Way (Track, Traction Power, Signals, Communications, Facilities) and other Railroads (AMTRAK, BNSF or UP), as required
  - f. Monitor on-going response activities in the field and provide updates to the OCC Supervisor and other Railroads (AMTRAK, BNSF or UP).
  - g. Provide and gather updates to and from RTDC Maintenance of Way and other Railroads as necessary through the completion of the event and the return to normal service.

**C. Completion of the event and the return to normal service**

1. Upon completion of the accident, incident or emergency event, the OCC Train Dispatcher, OCC Supervisor and the OCC Operations Supports must notify all parties RTDC have return to service.
2. All notification reporting requirements following the completion on the event must be fulfilled. This includes but is not limited to: TMDS, Asset Works, FRA and Aconex CA-074, when applicable.

**VII. ATTACHMENTS AND FORMS**

Appendix 1: OCC Incident, Accident and Emergency Event List

Appendix 2: OCC Incident, Accident and Emergency Notification Contact List

Appendix 3: OCC Emergency Notification Time Limits Table

Appendix 4: OCC Incident, Accident and Emergency Notification Time Limits Flow Chart



**Incidents, Accidents and Emergency Notification Procedure - OCC****VIII. REPORTING AND RECORD KEEPING**

The OCC Manager or his/her designee shall be responsible for ensuring compliance with all of the requirements of these procedures. This SOP will be reviewed and, if necessary, amended at least once each calendar year and whenever there is a material change in operational procedures.

All Incident Reports will be maintained in the TMDS system in accordance with the RTDC Record Retention Policy. Incidents that are determined to be Reportable to FRA will be recorded, filed and retained in compliance with 49 CFR Part 225 – Railroad Accidents/Incidents: Reports, Classification, and Investigations.

**IX. REVISION HISTORY**

<b>Number of Revision or Change</b>	<b>Date</b>	<b>Reason for Revision or Change</b>
Revision 0.1	02/10/2015	First Draft.
Revision 1	02/12/2015	First final version of the document.
Revision 2	05/28/2015	Update of Emergency Notification List and Time Limits Table and Procedure Section. Title of procedure changed to Emergency Notification Procedure – OCC
Revision 3	07/24/2015	To remove “ENS” reference, Standard Operating Procedure (SOP) number changed from RTDC-ER-ENS-02 to RTDC-ER-ENP-01
Revision 4	12/10/2015	“OCC SCC” added on Appendix 2 as per RTD-TRN-027495. Language added in relation to METRONET.
Revision 5	07/07/2016	To expand on notifications of Incidents, Accidents and Emergencies on the RTDC System by all OCC personnel. This procedure supersedes the following procedures: RTDC-ER-ENP-02; RTDC-TR-OCC-04; RTDC-TR-OCC-05; RTDC-TR-OCC-06; RTDC-TR-OCC-17



## Incidents, Accidents and Emergency Notification Procedure - OCC

### X. APPROVALS

Revised by: (b) (6)  
(b) (6) - OCC Manager  
RTDC Transportation Department

Date: 7/6/16

Revised by: (b) (6)  
(b) (6) - Chief Transportation Officer  
RTDC Transportation Department

Date: 07/08/16

Revised by: (b) (6)  
(b) (6) - Chief Safety and Security Officer  
RTDC Safety Department

Date: 07/17/2016

Revised by: (b) (6)  
(b) (6) - Quality Manager  
RTDC Quality Department

Date: 07/08/16

### XI. DISTRIBUTION

- ☒ General Manager
- ☐ Finance
- ☐ Payroll
- ☐ Contracts
- ☐ Purchasing
- ☐ Warranties
- ☐ Human Resources
- ☐ Warehouse
- ☒ Vehicles
- ☒ Training

- ☒ Transportation
- ☒ OCC
- ☒ Engineering
- ☒ Signals
- ☒ Power
- ☒ Communications
- ☒ Track
- ☒ Facilities
- ☒ Customer Service
- ☒ Document Control

- ☒ QA / QC
- ☒ Safety & Security
- ☐ Other: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

# Incidents, Accidents and Emergency Notification Procedure - OCC

## APPENDIX 1

### OCC Incident, Accident and Emergency Event List

Incident, Accident and Emergency Event List	Notification Activation									
	Metronet / First Responders	RTD SCC	FRA / NTSB	Amtrak / BNSF / UP	Ready Op to DTO/DT P/RTD	Rider Alert / PA/VMS	Train PA/VMS	Platform PA/VMS	LROCC / BOCC / DIA	Aconex CA-074
<b>Red Group Events</b>										
Fatality on RTDC Property	Yes	Yes	Yes	Yes	Yes	Yes, if delay is over 15 min to 4 or more trips during 15 min headway	Yes, if delay is over 15 min run time during 15 min headway	Yes, if delay is over 15 min system wide only	Yes	Yes
Train Collision (including any impact between railroad on track equipment and an automobile, bus, truck, motorcycle, bicycle, farm vehicle or pedestrian at a highway-rail grade crossing)	Yes	Yes	Yes	Yes	Yes				Yes	Yes
Train Derailment	Yes	Yes	Yes	Yes	Yes				Yes	Yes
Train Fire or Explosion on RTDC Property	Yes	Yes	Yes	Yes	Yes				Yes	Yes
Severe Weather Event / Acts of God	Yes	Yes	Yes	Yes	Yes				Yes	Yes
Police Actions	Yes	Yes	No	No	Yes				Yes	Yes
Major Service Delays (Delays longer than 1 hour)	Yes	Yes	No	No	Yes				Yes	Yes
Bomb Threats	Yes	Yes	No	No	Yes	No, during 30 min headway	Yes, during 30 min headway		Yes	Yes
Any media attention that would require an RTDC spokesperson	Yes	Yes	No	No	Yes				Yes	No
<b>Yellow Group Events</b>										
Security Incidents referred to RTD Security SCC (e.g. Trespasser)	No	Yes	No	No	Yes, if delay is over 10 min	Yes, if delay is over 15 min to 4 or more trips during 15 min headway	Yes, if delay is over 15 min run time during 15 min headway	Yes, if delay is over 15 min system wide only	Yes, if delay is over 10 min	Yes, if delay is over 10 min
Signal Violations	No	Yes	No	No						
Signal Issues	No	Yes	No	No						
Switch Issues	No	Yes	No	No						
Traction Power Issues (e.g. Power Loss)	No	Yes	No	No						
Train Mechanical Issues (e.g. Propulsion Issues)	No	Yes	No	No						
Medical Emergencies	No	Yes	No	No						
Wrong Doors Openings	No	Yes	No	No						Yes
Contractor Incidents on RTDC Property	No	Yes	No	No						Yes
Employee Injury on RTDC Property	No	Yes	No	No						Yes
Passenger Injury on RTDC Property	No	Yes	No	No						Yes
Passenger Elevator Entrapment	No	Yes	No	No	Yes	No	No	No	No	Yes

**Incidents, Accidents and Emergency Notification Procedure - OCC****APPENDIX 2****OCC Incident, Accident and Emergency Notification Contact List**

Internal Department/Title	Name	Email	Cell Number	Office Number	Comm. Means	Comm. By
<b>RTDC/DTO</b>						
General Manager	Anne Herzenberg	anne.herzenberg@rtdcraill.com	508-341-9715	720-460-5801	ReadyOps	OCC-S
Chief Engineer	Randall Duty	randall.duty@rtdcraill.com	512-466-7311	720-460-5860	ReadyOps	OCC-S
Deputy Chief Engineer	Mario Santiago	mario.santiago@rtdcraill.com	787-649-4953	720-460-5870	ReadyOps	OCC-S
Chief Transportation Officer	Frank Hauser	frank.hauser@rtdcraill.com	602-515-7372	720-460-5911	ReadyOps	OCC-S
Manager of Fields Operations	Mike Claiborne	mike.claiborne@rtdcraill.com	303-514-9813	-	ReadyOps	OCC-S
OCC Manager	Raymond Diggs	raymond.diggs@rtdcraill.com	617-839-3361	720-460-5901	ReadyOps	OCC-S
OCC Supervisors Desk	Several	-	-	720-460-xxxx	ReadyOps	OCC-S
Chief Mechanical Officer	Carl Atencio	carl.atencio@rtdcraill.com	719-580-0801	720-460-5880	ReadyOps	OCC-S
Deputy Chief Mechanical Officer	Joe Phillips	joe.phillips@rtdcraill.com	720-308-4177	720-460-5887	ReadyOps	OCC-S
Chief Safety and Security Officer	Barry McGauley	bmcgauley@bbius.com	562-233-4773	-	ReadyOps	OCC-S
Safety Specialist	Nicole Aguirre	nicole.aguirre@rtdcraill.com	425-466-6129	720-460-5816	ReadyOps	OCC-S
IT Manager	Carlos Rivera	carlos.rivera@rtdcraill.com	303-523-1044	720-460-5850	ReadyOps	OCC-S
Chief Financial Officer	Jim Clawson	jim.clawson@rtdcraill.com	303-601-1873	720-460-5830	ReadyOps	OCC-S
Procurement Contracts Manager	Roberto Arocho	roberto.arochio@rtdcraill.com	-	720-460-5838	ReadyOps	OCC-S
Human Resources Manager	Roxane Stuber	roxane.stuber@rtdcraill.com	-	720-460-5833	ReadyOps	OCC-S
Quality Manager	Ana Mercado	ana.mercado@rtdcraill.com	787-504-9666	720-460-5820	ReadyOps	OCC-S
<b>DTP</b>						
Project Director	Aaron Epstein	aaron.epstein@dtjv.com	917-434-3283	303-297-7528	ReadyOps	OCC-S
Project Communications Manager	Nadia Garas	nadia.garas@dtjv.com	720-255-5649	303-297-7526	ReadyOps	OCC-S
<b>RTD</b>						
RTD Light Rail	RTD Light Rail Control Center	-	-	303-299-3480	Phone Call	OCC-S
RTD Bus	RTD Bus Control Center	-	-	303-299-3000	Phone Call	OCC-S
RTD SCC	Security Command Center	-	-	303-299-3911	Phone Call	OCC-S
RTD Customer Care	-	customerarelt@rtd-denver.com	-	303.299.6000	ReadyOps	OCC-S

External Department/Title	Name	Main Number	Secondary Number	Comm. Means	Comm. By
First Responders	Police / Fire / Medical	911	-	Metronet	OCC-TD
Federal Railroad Administration	National Response Center	800-424-8802	800-424-0201	Phone Call	OCC-S
National Transportation Safety Board	National Response Center	800-424-8802	800-424-0201	Phone Call	OCC-S
Denver International Airport	Communication Command Center	303-342-4200	303-342-4020	Phone Call	OCC-S
Denver International Airport	Supervisor (PD- FD- EMT)	303-342-4211	-	Phone Call	OCC-S
BNSF Railway (Police)	Police Control Center	800-832-5452	-	Phone Call	OCC-OS
BNSF Railway (Rail)	Operations Control Center (Train Dispatcher Office)	817-867-7094	-	Phone Call	OCC-OS
Amtrak	Control Center	800-331-0008	800-424-8802	Phone Call	OCC-OS
Union Pacific Railroad (Police)	Police Control Center	888-877-7267	-	Phone Call	OCC-OS
Union Pacific Railroad (Rail)	Operations Control Center (Denver Train Dispatcher Office)	402-636-1658	800-726-1178	Phone Call	OCC-OS
Union Pacific Railroad	Grade Crossing Hotline	800-848-8715	-	Phone Call	OCC-OS

**Incidents, Accidents and Emergency Notification Procedure - OCC**

**APPENDIX 3**  
**OCC Emergency Notification Time Limits Table**

Emergency Event	First Responders/911	*FRA/NTSB	RTD-SCC	Other Railroads	Passengers PA/VMS	**General Manager **Chief Transportation Officer **Deputy Chief Transportation Officer **OCC Manager **Chief Safety and Security Officer **Train Operators **Transportation Supervisors	**Chief Mechanical Officer **Chief Engineer **Deputy Chief Engineer **Chief Financial Officer	**DTP / RTD Public Relations	**RTD LROCC & BOCC and DIA
1. Accident/Incidents that result in: a. Any fatality to a passenger or employee arising from railroad operations. b. Death or injury to five or more person c. Death of an employee of a contractor to RTDC occurring on RTDC property.	ASAP	ASAP No longer than 1 hour	ASAP	5 Min.	5 Min.	5 Min.	10 Min.	10 Min.	10 Min.
2. A train accident/incident that results in: a. Serious injury to two or more train crewmembers or passengers requiring admission to a hospital; b. Evacuation of a passenger train c. A fatality at a highway-rail grade crossing; d. Damage of \$25,000 or more to a passenger train, including railroad and non-railroad property. e. A collision or derailment on the main line or that fouls a main line.	ASAP	ASAP No longer than 1 hour	ASAP	5 Min.	5 Min.	5 Min.	10 Min.	10 Min.	10 Min.
3. Any highway rail grade crossing signal failure that results in: a. A accident between a train or on-track railroad equipment and an automobile, bus, truck, motorcycle, bicycle, farm vehicle, or pedestrian.	ASAP	ASAP No longer than 1 hour	ASAP	5 Min.	5 Min.	5 Min.	10 Min.	10 Min.	10 Min.
4. Any rail equipment accident/incident that results in: a. A collisions, derailments, fires, explosions, acts of God, and other events involving the operation of on-track equipment (standing or moving) that result in damages higher than the current reporting threshold (\$10,500 for calendar year 2015).	ASAP	ASAP No longer than 1 hour	ASAP	5 Min.	5 Min.	5 Min.	10 Min.	10 Min.	10 Min.
5. Fire/smoke on train or RTDC property.	ASAP	N/A	ASAP	5 Min.	5 Min.	5 Min.	10 Min.	10 Min.	10 Min.
6. Hazard materials release from train on/near RTDC property.	ASAP	N/A	ASAP	5 Min.	5 Min.	5 Min.	10 Min.	10 Min.	10 Min.

\*Timeframe to notify FRA are dictated by 49CFR Part 225. Timeframe to notify NTSB are dictated by 49CFR Part 840.3. For additional guidance on FRA reporting criteria contact DTO Safety and Security Department.

\*\* These timeframes are goals.

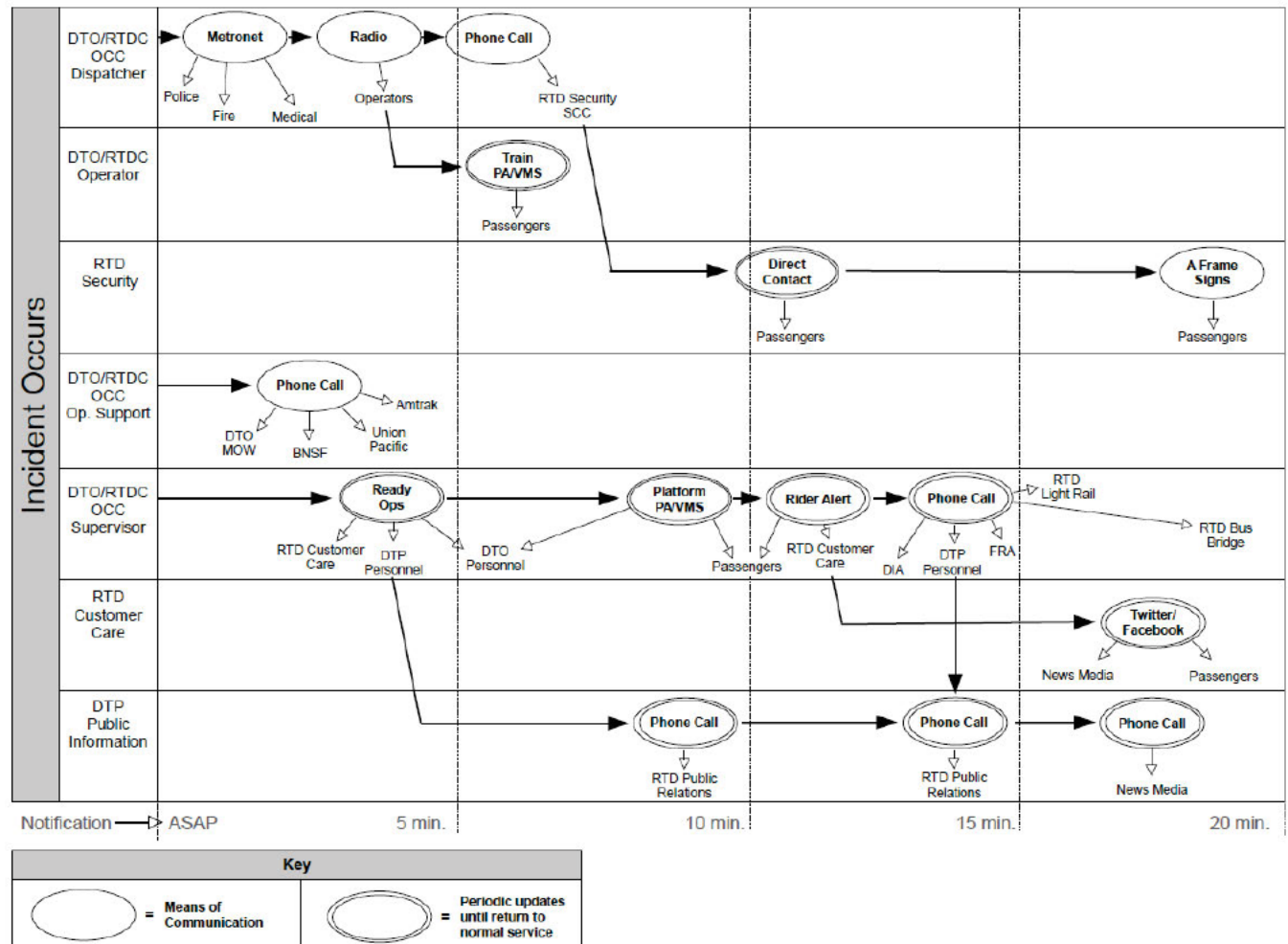
For the purposes of this procedure train accidents/incidents are collisions, derailments, fires, explosions, acts of God, and other events involving the operation of on-track equipment (standing or moving) including any impact between railroad on track equipment and an automobile, bus, truck, motorcycle, bicycle, farm vehicle or pedestrian at a highway-rail grade crossing.



# Incidents, Accidents and Emergency Notification Procedure - OCC

## APPENDIX 4

### OCC Incident, Accident and Emergency Notification Time Limits Flow Chart





**Emergency Request to De-energize Overhead Catenary System****I. PURPOSE**

This procedure explains how first responders or RTDC personnel can request that the Overhead Catenary System (OCS) be de-energized in emergency situations.

**II. RESPONSIBILITIES**

This procedure applies to first responders (Fire, Police and Emergency Medical Services) and RTDC personnel.

**III. DEFINITIONS, ACRONYMS AND ABBREVIATIONS**

**C&S** - Communications and Signals

**DTO** – Denver Transit Operator

**OCC**– Operations Control Center

**OCS** - Overhead Catenary System

**PPE** - Personal Protective Equipment

**RTD** – The Regional Transportation District

**RTDC** - Regional Transportation District Commuter Railroad

**SOP** – Standard Operating Procedure

**IV. SAFETY GUIDELINES**

The OCS must be de-energized and remain de-energized to allow for a safe and effective response to certain types of emergencies. However, de-energization is appropriate in only limited situations. RTDC personnel will work with emergency responders to develop emergency response plans and will provide guidelines and training to help both emergency responders and RTDC staff resolve any and all emergencies as quickly and safely as possible.

**V. SPECIAL TOOLS AND EQUIPMENT**

TMDS/TPMS to be de-energized remotely.

**VI. PROCEDURE****A. Instruction**

- 1) PERSONS OR EQUIPMENT MUST NOT GET WITHIN 10 FEET OF THE OVERHEAD WIRES UNTIL ADVISED BY A QUALIFIED RTD TRACTION POWER TECHNICIAN ON SITE THAT THE WIRE HAS BEEN TESTED DE-ENERGIZED AND GROUNDED.
- 2) Call RTDC Operations Control Center (OCC). (East Corridor Dispatcher -720-460-5907, Gold/NWES - 720-460-5908 and OCC Emergency Hotline -720-460-5959).  
When the OCC Train Dispatcher answers:
  - a) Identify yourself
  - b) Request a power outage
  - c) Describe the nature of the emergency
  - d) State your location
  - e) Provide your telephone number
  - f) STAND AWAY FROM THE OCS UNTIL A TRACTION POWER TECHNICIAN ARRIVES

**Emergency Request to De-energize Overhead Catenary System**

- g) the OCC Train Dispatcher will,
    - i) Protect the track in the area
    - ii) De-energize the power remotely
    - iii) Dispatch a Traction Power Technician to the site
    - iv) Dispatch a supervisor to the site
  - h) Upon arrival at the scene, the Traction Power Technician will,
    - i) Inform the Dispatcher that he has arrived at the scene
    - ii) Test the de-energized wire
    - iii) Ground the wire
    - iv) Inform the Dispatcher that the wire is grounded.
    - v) Inform the emergency responder(s) when the wire has been de-energized, tested de-energized and grounded.
- 3) When the emergency is over,
- a) Verify that all personnel working under your direction are clear of the scene
  - b) Inform the RTDC supervisor on site that you no longer need the power OCS de-energized.

**VII. ATTACHMENTS AND FORMS**

None.

**VIII. REPORTING AND RECORD KEEPING**

The RTDC OCC Manager or his/her designee shall be responsible for ensuring compliance with all of the requirements of these procedures. The document will be reviewed and amended, if needed, based on the following conditions:

- new or expanded passenger service,
- revised operational procedures.

If none of these events occurs, the RTDC OCC Manager or his/her designee will review the document annually and amend if needed.

**IX. REVISION HISTORY**

Number of Revision or Change	Date	Reason for Revision or Change
Revision 0.1	09/16/2013	First Draft.
Revision 1	02/12/2015	First final version of the document.
Revision 2	05/19/2015	Minor changes. Clarification on Technician role.
Revision 3	07/24/2015	To remove "ENS" reference, Standard Operating Procedure (SOP) number changed from RTDC-ER-ENS-03 to RTDC-ER-OCS-01
Revision 4	02/02/2016	To add Operations Control Center phone numbers.

**Emergency Request to De-energize Overhead Catenary System****X. APPROVALS**

Prepared by:

(b) (6)

Date:

4/20/14

(b) (6) – OCC Manager  
RTDC Transportation Department

Revised by:

(b) (6)

Date:

4/20/2016

(b) (6) – Chief Transportation Officer  
RTDC Transportation Department

Revised by:

(b) (6)

Date:

4/21/2016

(b) (6) – Chief Safety and Security Officer  
RTDC Safety Department (b) (6)

Revised by:

(b) (6)

Date:

4/20/2016

(b) (6) – Quality Manager  
RTDC Quality Department**XI. DISTRIBUTION**☒ General Manager☒ Transportation☒ QA / QC☒ Finance☒ OCC☒ Safety & Security☒ Payroll☒ Engineering☐ Other: \_\_\_\_\_☒ Contracts☒ Signals☐ Other: \_\_\_\_\_☒ Purchasing☒ Power☐ Other: \_\_\_\_\_☒ Warranties☒ Communications☐ Other: \_\_\_\_\_☒ Human Resources☒ Track☐ Other: \_\_\_\_\_☒ Warehouse☒ Facilities☐ Other: \_\_\_\_\_☒ Vehicles☒ Customer Service☐ Other: \_\_\_\_\_☒ Training☒ Document Control☐ Other: \_\_\_\_\_